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## **SECONDARY EDUCATION**

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MAULANA ABUL KALAM AZAD

We in the Secondary Education Division of the Ministry join with the nation in mourning the sad and sudden death of Maulana Abul Kalam Azad. The nation has lost in him a leader and an elder statesman ; we an eminent scholar and educationist. His was a truly unique personality, a blend of many qualities of intellect, scholarship, independence of mind and vision that set him apart and above the rest of men. The loss is all the greater because one knows that, with his passing away, has gone an age that will not return.

In the ten years that he was the Education Minister, Maulana Azad had to fight an uphill battle to make the country realise that education was, and should be recognised as an essential and integral part of the country's programme of national reconstruction. As he said at the last 25th Session of the Central Advisory Board of Education. "When the draft of the First Plan was made, education was almost completely ignored. There seemed to be a general view that we should take up only subjects which would give quick returns..... I need hardly say that this approach was basically wrong. In my view education is the basis for the success of every sphere of planning. Industrial progress cannot be achieved without technical education. One may go further and say that without general education no nation-building programme can be carried out." And if education did come to have some place of importance, it was mainly because a man of his stature was in charge of it.

In his tribute to Maulana Saheb, this is how Shri K.G. Saiyidain, Secretary to the Union Ministry of Education, has briefly summed up his personality : "As a man, Maulana was even greater than his work as a Minister. Never interfering in details—not even greatly interested in them, unless they impinged in some way on principles or policy.....He presided with incomparable poise and dignity over the Conferences of Education Ministers and the Central Advisory Board of Education, unravelling complex issues with patience and understanding. We would sometimes be worried about possible conflicts and complications which might arise when many diverse views had to be reconciled but not the Maulana. The same sympathy and understanding and absence of a doctrinaire approach which enabled him to deal with complex political situations guided him in the educational field and kept the keel of our educational ship steady.

"Such was Maulana Azad. Where shall we find another educational leader of his calibre ?"

# This Issue

ONE of the important objectives of the diversified school curriculum, in the words of the Secondary Education Commission, is to increase the "productive or technical and vocational efficiency of our students". The underlying idea of this recommendation is two-fold—(a) to gear education to the needs of the community and (b) to shift the emphasis from the purely academic type of instruction to the practical. Three articles in this issue bear directly on this subject. "School Science as a Basis for Careers" discusses to what extent the study of science in schools helps to prepare a student for a career in this line. "The Diversified Curriculum and Vocational Preparation" seeks to bring out the merits of the different courses and the extent to which such courses will be helpful to students in entering a vocation of their choice in later life. "Aids to the Study of Careers" is an article on the methods of providing vocational guidance to school students.

The discussion initiated in our Readers' Forum in the last issue is working up to a heated controversy. The question before us is—is secondary education primarily a general preparation for life or is it a training ground to prepare a student for an occupation at the end of his secondary school career? The reader who initiated the discussion contended that secondary education should prepare a student for a vocation. To that the reply has come, prompt and decided—"No". We shall welcome more opinions and as many points of view as possible on this subject.

In this issue we carry a third series of articles in the feature "How I Teach It". From the response received so far it seems that teachers of kindergarten and primary schools are more enthusiastic to talk about their teaching methods than teachers of secondary schools. But since our concern is mainly with secondary schools it has not been possible to publish the articles sent by teachers of the younger age groups. Articles of general interest included in this issue bear on standards of English in our secondary schools, textbooks, the role of mental testing in guidance work in India, individual classroom projects undertaken by teachers, an informative, interesting article on secondary education in the U.S.S.R and other educational news.

# SCHOOL SCIENCE AS A BASIS FOR CAREERS

THE value of studying science at school as a preparation for certain technical or professional studies has long been recognised. But apart from that the study of science both at school and college is also very popular. Why? The answer to that is partly to be found in what a college principal once described as "the desire of every young man to become an engineer and every girl to become a doctor" and partly in some other factors. It will be useful to discuss these factors first before proceeding to consider how school science programmes can be effectively oriented towards the future careers of our youth.

## Selection of science students

Many parents value science as part of the necessary general education of their children even if they have finally to offer an arts course. This need should now be

served by the general science courses offered as part of the core subjects in the reorganised higher secondary syllabus. In the main, however, parents recognise that a technical man is less likely to remain unemployed or poorly employed than one with a general arts education. They are, therefore, keen to see that their children take science at school so that they can go in for technical studies. At the same time, offering science at school or even college or university does not handicap their children in any way in so far as competitions for administrative and allied services are concerned. In addition, science courses generally secure better marks and higher positions at examinations. The consequence is that a large number of pupils, whether their future careers require it or not, join these courses. Making provision for science courses is,

however, an expensive proposition and having provided for general science as a part of the general education of our youth, we might as well make the most efficient use of elective science courses by selecting for these courses pupils whose higher studies or future careers call for such preparation. Procedures for such selection are being devised at many places mainly in the form of tests and schedules or inventories. Research tends to indicate that linguistic ability, proficiency in numbers, space perception and, perhaps, mechanical skill are some of the elements which go to make up a good student of science. It is helpful to develop and perfect tools to measure these qualities. I would also suggest that we simultaneously pursue another line of approach too, that is, provide for a wide variety of activities through which children develop as well as discover their abilities, skills and interests.

**Sureshachandra Shukla**

By

## The science programmes must be carefully planned

Selecting pupils who will best profit from the courses is, however, only the beginning of the process. The second important step is to devise science programmes which would best serve the needs of pupils with varying abilities, interests and educational and vocational goals. The programmes have to be planned so that the boys or girls who will go into technical training immediately following higher secondary education or those who will take medical or engineering or technological education at the degree level or those who will study science at a university with a view to teaching or research—fundamental or applied—are all able to derive the maximum benefit from their school science.

To this end we might first consider elective subjects or groups such as agriculture, geology or home science which are not fundamental sciences. Teaching these at the higher secondary level suffers at present from the handicap that while they do not prepare a pupil for a corresponding career, they are not always accepted as adequate preparation even for higher studies in corresponding fields. Thus an agricultural college would rather admit a student who has studied adequate physics and chemistry (and possibly, zoology and botany) at the higher secondary stage than one who has studied agriculture. Prejudice is partly responsible for this attitude of higher professional institutions. So partly is the fact that syllabi at these institutions have in the past been framed on the assumption that the pupils have gone through a traditional physics—chemistry or physics—chemistry—biology course at the secondary level. But it is also true that the general training and disciplinary value of the more vocational biased or applied courses at the high school level is not often very high. It is quite true, as argued by the exponents of the multipurpose school and diversified secondary education, that all the courses are equally educative and they are designed to suit the different interests and different specific abilities of particular pupils. But this statement has to be realised in practice in order to change the present situation in which these courses tend to become more mechanical and less helpful to the development of general abilities and in which it is the less bright child who offers these courses. Meanwhile, there is some validity to the argument of the university man or the professional or technical institution that these courses attempt unsuccessfully to give specific training and that too inadequate at a very early stage at the expense of the development of reasoning, basic skills and fundamental concepts.

Apart, however, from the need for better planning in courses in the more applied branches of science, it is necessary to develop activities and programmes so that the student of the sciences, pure or

applied, at the higher secondary stage is best able to find his interests and develop his abilities. Many varied and different practices in this respect prevail in different countries. The American tendency is to develop a comprehensive high school where the very competent and the not-so-competent pupils study together but offer different courses to suit their abilities and interests on the one hand and the educational and vocational plans on the other. The British public and grammar schools develop Sixth Form work for the very competent pupil who specialises in a fundamental field and prepares for the university. The Soviet school system has after a great deal of experience with polytechnisation (linking the study of science and mathematics to actual productive activity in the workshop) appears to have settled down to a pattern of compulsory science and mathematics of a fundamental character and at a sufficiently advanced level combined with hobbies and a great deal of practical work involving interest as well as originality in the scientific or technical circles at the school or the pioneer palaces, young naturalists' stations, etc.

### The importance of science clubs

The two essentials that emerge from these various practices are (i) provision for teaching basic mathematics and scientific concepts at least to the 'ablest' pupils so that they are properly prepared for technical studies or training for a higher scientific study or research and (ii) provision of a wide variety of hobbies and scientific activities of a relatively voluntary character to help the child find and develop his abilities and interests. The former is a question of developing an adequate syllabus (and suitable methods of teaching), a process already initiated by the All-India Council for Secondary Education. Experience with its syllabuses should lead to satisfactory solutions. The latter involves the promotion of a wide-spread science club movement at all levels.

Science clubs can be organised to promote a wide variety of activities such

as trips, making soaps, cosmetics and matches, manipulation of machines and setting up models for bird watching, studying the sky or the weather, maintaining aquaria and vivaria, collecting and rearing insects, experiments in gardening, etc. Voluntary science club activity during the first eight years of school will help the teacher to spot out those students who have marked aptitudes in different directions e.g. a knack for handling machines, an ability to set up hypotheses and devise means of testing them, interest in birds, plants, animals, chemicals, radio, photography, etc. This should help in allocation to the science streams of our secondary schools those pupils who would best profit from them. Science club activity at the higher secondary school should enable pupils to develop these interests and abilities still further by taking up more challenging projects which require greater expertness and persistence and enable them to do a great deal more work and understand much more and better than our present-day relatively formalised methods of instruction would permit us to imagine. Once the initiative of pupils is released, originality and research attitudes will result. To a large extent, these objectives can be achieved if to the school laboratory is added a workshop with tools and assistance and if these are made available to pupils during leisure hours so that they could devise their own experiments and equipment. Steps might have to be taken to convince the teachers of the fruitfulness of the science club approach so that they would think it worth their while to give extra time and attention to club activity.

Development of a really adequate science club programme involves, however, the assembling at select points of equipment and expert assistance on a scale beyond the resources of any single school. Besides it would be wasteful to devote all these resources to any one school. Central science clubs in the

larger industrial towns, to begin with, could be organised where advanced experiments and guidance from experts in, for instance, the different branches of geology, aero-modelling, radio and so on, were made available to the most capable and promising young people from different schools in the area. Industrial and research enterprises in the public as well as in the private sector could well cooperate in this effort to pick out science talent between the ages of 14 and 17 and provide it with tasks both challenging and exciting and opportunities adequate to their abilities.

### Vocational Orientation

While provision of general science courses, improvement of syllabi in applied as well as basic science and provision of science clubs on an adequate scale should meet the needs of most of our pupils by developing their interests and abilities, an important aspect of the programme should be to familiarise pupils with the world of work. Our curricula and tradition are not yet flexible enough to admit of work-experience being treated as part of secondary education but the school will have to organise on a large scale opportunities for pupils to know what opportunities and conditions in the enterprises where science is applied to production are like. Talks by specialists, frequent but carefully planned visits to industrial enterprises, study of particular processes and machines by those interested as part of club activity could be some ways whereby a science student could be helped to grow his interest and aptitude into a career. Collaboration between school science and industry has not so far been provided on an extensive scale in our country but once it starts, the situation could be visualised where schools could organise one extra year or two of study for the secondary school leaver, thereby preparing him more specifically and definitely for an industrial career.

# Activities at the Centre

## Directors of Public Instruction/ Directors of Education meet

AN informal meeting of the Directors of Public Instruction/Directors of Education of the various State Governments took place in New Delhi on 3rd February 1958, with Shri K. G. Saiyidain, Secretary, Union Ministry of Education and Scientific Research, in the chair.

The meeting discussed : (i) Teaching of languages in the light of the decision to teach three languages simultaneously in schools, (ii) Dr. Wilder Penfield's observations on "The human brain and the learning of Secondary languages", (iii) Future of Extension Services in Training Colleges, (iv) Mr. Alen Stein's proposal regarding research on school-house design and construction, (v) Planning Commission's recommendations on Elementary Education and (vi) Indiscipline among students and remedies for combating the evil.

## Central Advisory Board of Education

The 25th Session of the Central Advisory Board of Education in India was held on February 6 and 7, 1958 in New Delhi.

Among other things the Board discussed :

- (i) The Progress of Educational Development Plans implemented by the Government of India.

- (ii) Progress of Educational Development Plans implemented by the State Governments.
- (iii) Five-Year Plans of Educational Development in Basic, Secondary and Social Education.
- (iv) Report on the Progress of Technical Education during 1955-56.
- (v) Report on the implementation of various schemes for the promotion of Hindi under the Second Five-Year Plan during 1956-57.
- (vi) Report on the Progress of Audio-Visual Education during 1956-57.
- (vii) Report on the development programme of physical education, sports and games, scouting and guiding and the National Discipline Scheme.
- (viii) Report on the Government of India Scholarships Scheme.
- (ix) Report on the work of the All-India Council for Secondary Education.
- (x) Proposal for setting up Adult Schools.
- (xi) Proposal for establishing Multi-purpose Training Institutions to train teachers for different stages of education.
- (xii) Proposal for conducting special courses for teachers of Secondary schools to take the Master's degree.
- (xiii) Proposal for production of instruments for the teaching of Science in Secondary Schools.

## ACTIVITIES AT THE CENTRE

A summary of the main recommendations of the Board will be published in the next issue.

### Central Bureau of Educational and Vocational Guidance

#### Career conferences and Exhibitions

Three-day career conferences and exhibitions of career literature were held in three Higher Secondary schools of Delhi. During these conferences, talks and discussions were held on further education courses and opportunities open to higher secondary school leavers. Participants included counsellors, teachers, officials of the Directorate General of Resettlement and Employment and professional men from many walks of life.

The exhibitions displayed printed literature, "Guide to Careers" pamphlets, handbooks on technical training facilities, occupational orientation filmstrip narratives and posters and charts prepared by the students of the school leaving classes.

#### Role of Hobbies' Clubs in the Guidance Programme of schools

Under the guidance of the Bureau, some schools of Delhi are organising hobbies' clubs as an important item in their guidance programme. The purpose of such clubs is to provide opportunities to students for developing talents and skills. The students of the Raisina Bengali Higher Secondary School which has a comprehensive guidance programme under a whole-time counsellor, have taken the initiative to start a carpentry and wood-work centre in the school.

#### Distribution of guidance literature

The Bureau distributed the following guidance material to all guidance organisations, selected teachers' colleges and multipurpose schools :

- (i) printed copies of the Proceedings of the Working Conference on Educational and Vocational Guidance in Multipurpose schools, held in June 1956 at Ootacamund,

- (ii) a manual of educational and vocational guidance for secondary school teachers,
- (iii) occupational orientation filmstrip narratives,
- (iv) a brochure "Your child at the crossroads",
- (v) a special Guidance Number of the Educational Forum published by the Central Institute of Education.

A series of 11 posters dealing with different aspects of educational and vocational guidance on Secondary schools were printed and distributed to all secondary schools.

#### Seminars and Conferences

The Bureau participated in the following seminars, conferences, guidance training courses, symposia etc.

- (i) a three-day seminar on educational and vocational guidance at Allahabad.
- (ii) All-India Educational Conference and the annual meeting of the All-India Science Teachers' Association at Madras.
- (iii) The Conference of Psychologists at Bombay.
- (iv) Training Course for Teacher-counsellors at Cuttak.
- (v) University Youth Leadership Training Camp at Jaipur.
- (vi) Symposium on 'how to spot out and help maladjusted children' organised by the Delhi State Post-Graduate Teachers' Club at Delhi.
- (vii) The Asian Regional Seminar of the I.L.O. on Vocational Guidance and Employment Counselling at Delhi.

#### Guidance Service

The Bureau has set up Guidance Laboratory of tests and apparatus. A small research unit consisting of psychologists, statistical and testing assistants has begun to function.

There is a proposal to institute, from July 1958, one-session course in educational and vocational guidance at post-

graduate level. This course is designed to meet the requirements of the guidance personnel working in guidance organisations, multipurpose schools, colleges, and youth employment and counselling units of the employment exchanges.

The Guidance Library of the Bureau has a large and comprehensive collection of books, directories, periodicals, dealing with guidance and counselling, curriculum organisation, psychology, mental and educational measurement, hobbies and careers, occupational briefs and vocational and industrial education. These are lent to all educational organisations for research consultation.

Guidance field service continued to be an important item of the Bureau's activities. Two higher secondary schools in Delhi were given technical help in starting guidance services.

### **Central Bureau of Textbook Research**

#### **Research**

The Central Bureau of Textbook Research has been working, for the past three years, on the formulation of some objective means of estimating and evaluating textbooks. This problem has two aspects : (i) collecting data and (ii) evaluating or judging that data, as good or bad, in terms of certain educational objectives. As far as (i) is concerned the Bureau has collected data and tabulated it in the form of *analysis sheets* for science, history, geography and language. As far as the second aspect goes the Bureau has prepared score-cards for evaluating textbooks for language and science at the primary school level. The score-cards and analysis sheets are under publication. They would be of great use to those confronted with the selection of one textbook or manuscript as the best from among the many submitted for selection.

Also, some books, both Indian and foreign, have been subjected to this analysis in the various subjects. The

purpose here was to see if there were any marked gaps anywhere in our books and in what way these could be remedied.

The Bureau has recently prepared a special journal on textbooks in collaboration with the Central Institute of Education. This journal consists of about 10 articles and is specially meant for the teacher who uses the textbook in the classroom. It discusses the textbook from various angles, such as, audio-visual aids, homework, teacher-pupil planning and the like.

The Bureau continued its work on the syllabus project that was started in cooperation with the Delhi schools to draw up a single syllabus pattern for the basic and non-basic schools. The work is likely to be completed in another two months.

The UN project of drawing up the syllabus for the first 12 grades is being continued.

### **Promotion of Gandhiji's Teachings**

Under its scheme of Promoting Gandhiji's Teachings and Way of Life in schools and colleges, the Ministry invited Kumari Manuben Gandhi, grand-niece of Mahatma Gandhi, to give a course of lectures on Gandhiji's life and teachings from her personal association with him, in 23 selected schools of Delhi. Her series of lectures lasted from February 18 to March 17, 1958.

The programme was inaugurated by Shri K.G. Saiyidain, Secretary to the Ministry of Education and Scientific Research, at the Rai Kedar Nath Girls' Higher Secondary School, Karol Bagh, Delhi, on the morning of February, 18. In his speech Shri K.G. Saiyidain said that the greatest heritage of Gandhiji was his humanism, truthfulness, courage, uprightness and integrity of character. He hoped that through the teaching of Gandhiji's ideas in schools a new relationship would be established between the Father of the Nation and the young generation.

## ACTIVITIES AT THE CENTRE

### **Central Braille Press**

The Central Braille Press at Dehra Dun released the first issue of its quarterly

digest in Braille called 'Alok'. This is a Hindi publication and its main function is to provide reading material of general interest to the blind.

### **Assistance to Voluntary Educational Organisations in the field of Secondary Education**

The following Institutions were sanctioned grants during the period under report :—

<i>Name of the Institution</i>	<i>Name of the Project</i>	<i>Amount</i>
		Rs.
1. All-India Federation of Educational Associations, Kanpur.	Publication of Indian Journal of Education.	1000/-
2. S.R.S.D. Higher Secondary School, New Delhi.	Construction of school building.	35,000. -
3. R.K. Mission, Charrapunji, Assam.	Construction of Students Home.	31,250/-
4. Sri Guru Hari Krishan Girls' Higher Secondary School, New Delhi.	Electric and sanitation installations in the school building.	15,000/-
5. Shri Shivaji Education Society, Amravati (Bombay)	For improvement of Central Library, Reading Room and Museum.	1,00,000 -
6. Sri R.K. Mission, Sarda Vidyalaya Girls High School, Madras.	Construction of a multipurpose hall.	15,000/-
7. Sarvodaya Education Society, Mysore	Purchase of equipment for laboratory.	4,166 -
8. R.K. Mission Charrapunji, Assam.	Construction of a verandah and additional wing to the existing High school building.	30,125/-
9. D.A.V. Higher Secondary School, New Delhi.	Recurring grant for the Educational and Vocational Guidance Centre.	436/-
10. All-India Federation of Educational Associations, Kanpur.	Construction of Association building at Kanpur.	30,000/-
11. R.M. Arya Girls' Higher Secondary School, New Delhi.	Construction of school building.	35,000/-
12. National High School (Girls), Triplicane, Madras.	Electric installation in the High School.	2,000/-
13. Jivan Bharati, Surat, Bombay.	Cooperative training programme for Secondary students.	1,402/-
14. R.K. Mission, Patna, Bihar.	Construction of Students' Home.	45,000/-

## Sports

During the period under review a Coaching Camp in Wrestling was held at Madras from 21st December 1957 to 4th January 1958. 19 trainees representing various Universities/State Education Departments received training in the method and technique of the game.

A Table Tennis Camp was held for 15 days at Lucknow, beginning 17th February 1958. 18 trainees received training in this game.

A Regional Coaching Camp in Athletics was held at Bombay for a period of 3 weeks, beginning 17th February 1958.

## Physical Education

A meeting of the Central Advisory Board of Physical Education and Recreation was held on 31st January 1958. The Board recommended that the Government of India should set up an independent committee to coordinate all schemes bearing on physical education, recreation, sports and youth welfare and evolve an integrated policy.

The Board also decided to constitute an *ad hoc* committee to report on the facilities available in the physical education institutions. Besides considering the question of recognition of diplomas and certificates given by the institutions concerned, this committee would also make recommendations regarding the expenditure required for the development and improvement of these institutions. Grants to institutions would be made on the basis of the recommendations of this Committee.

The Board recommended that apart from the two seminars to be held during the first half of 1958 at Madras and Mahabaleshwar, two more seminars should be held during the course of this year, namely, one seminar for experts in indigenous institutions like *vyayamshalas* and another for persons working in the field of recreational activities.

In order to evaluate the existing literature on physical education and to consider ways and means for the preparation of fresh popular literature in the field, the Board nominated an *ad hoc* committee to look into the matter and make necessary recommendations.

The Central Advisory Board of Physical Education and Recreation has recommended the launching of Physical Efficiency Drive on a nation-wide scale in order to arouse in the youth of the country an enthusiasm for physical fitness and a desire to maintain a good standard of physical excellence. The Board has approved certain athletic and other physical efficiency tests prepared by Shri P.M. Joseph, Principal, Lakshmi Bai College of Physical Education, Gwalior, and recommended that these should be put into operation as early as possible.

## Youth Welfare

### *Youth Welfare Boards and Committees*

In order to have a comprehensive organisation to implement youth welfare programmes, it has been suggested to the Universities and the State Governments to set up Youth Welfare Boards and Committees in their respective regions. In order to meet 50% of the administrative expenditure on this scheme the State Governments and Universities are eligible for financial assistance up to Rs. 10,000/- and Rs. 4,000/- respectively. During the quarter ending 15th February 1958, the following grants have been sanctioned under this scheme :—

- (i) University of Gujarat Rs. 4,000/-
- (ii) University of Jadavpur Rs. 3,830/-
- (iii) University of Patna Rs. 3,924/-

### *Youth Leadership Training Camp*

The seventh Youth Leadership Training Camp was held at Jaipur from 15th February 1958 to 2nd March 1958. The Universities of Vikram, Jabalpur, Rajasthan, Kurukshetra, Gorakhpur, Jadvapur and Kashi Vidyapeeth participated. Twenty five staff members of these Universities received short-term training in

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the techniques of organising extra-curricular youth welfare activities in educational institutions. A sum of Rs. 11,500 was sanctioned for this camp.

### Student Tours

Ninety five batches comprising in all 2676 students and 253 teachers benefitted from the Government of India's scheme of financial assistance for the encouragement of educational tours during the last quarter. Financial assistance is granted to the extent of 75% of the Railway/Bus fare at concessional rates for students.

### Campus Work Projects

During the quarter under review, a sum of Rs. 3,06,500 was sanctioned to 12 State Governments for the construction of 24 recreation halls-cum-auditoria, 5 gymnasiums, 2 stadia and 2 open air theatres, in schools in various States.

NEWS AND NOTES  
FROM  
ALL-INDIA COUNCIL FOR  
SECONDARY EDUCATION

### Extension Services

During the quarter under report grants amounting to Rs. 2,11,800 were given to the Extension Departments of the various Training Colleges of the first and second flights. Another sum of Rs. 9,000/- was granted to six colleges for meeting freight and cartage of T.C.M. equipment.

A ten-day workshop of the Co-ordinators of Extension Services Departments of the fifty-two training colleges included in the project was held from 22nd November to 2nd December 1957 at the Central Institute of Education, Delhi. The workshop was intended to give training to the participants in the use and care of the equipment supplied by the Council to the Extension Services Departments of the training colleges.

### Seminars and Workshops

The A.I.C.S.E. organised an all-India seminar on the "Teaching of English" at

Nagpur under the direction of the British Council from 5th December to 20th December 1957. The seminar was intended for members of the Faculty of Training Colleges responsible for the subject "Special Methods in Teaching English". It considered the problems arising out of the study of English as a foreign language in Secondary schools in India with reference to the revised syllabus in English now in use in various States and the draft syllabus in English for Secondary schools published by the Council. A sum of Rs. 15,000/- was spent on the seminars.

Two-day State Seminars of Headmasters and Education Officers of Mysore and Bengal, each lasting 15 days, were held at Mysore, in January 1958 and Digha in February 1958 respectively. The seminars discussed the problems relating to Secondary education in the light of Secondary Education Commission Report and the Draft Syllabus issued by the All-India Council for Secondary Education. The Council sanctioned a total grant of Rs. 14,200/- as subsidy to meet the cost of the seminars.

A four-day follow-up workshop of those headmasters who had started some projects in their schools as a result of participation in previous seminars, was held at Poona between December 20 to 23, 1957. The aim of the Workshop was to encourage the headmasters and guide them in the proper implementation of the projects introduced by them. A grant of Rs. 3,000/- was sanctioned to meet the entire expenditure of the Workshop.

A five-week Seminar-cum-Training Course for Agriculture teachers of multi-purpose schools in Southern India was held at Bangalore, beginning 1st December 1957. Another five-week Seminar-cum-Training Course in Home Science for teachers of multipurpose schools of northern, eastern and western zones was held at the Lady Irwin College, New Delhi, beginning December 21, 1957.

The aim of the seminars was to

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provide a certain measure of pedagogical training to those teachers who are at present without any professional qualifications and to help them to understand the implications of the syllabus in Agriculture and in Home Science respectively. A sum of Rs. 10,000/- for each seminar was remitted by the Council to meet the expenditure of the seminars.

A ten-day Subject Teachers' Seminar in General Science and Social Studies was held in Mysore State under the management of the Mysore State Education Federation. A sum of Rs. 5,000/- was given as subsidy to meet the cost of the Seminar. Also thirteen-day Subject Teachers' Seminars were held at the following places to discuss the special methods of teaching in different subjects: Vellore, Agra, Quilon, Delhi, Jabalpur, Angul, Lucknow, Kumarapalayam, Bangalore and Mysore.

A total sum of Rs. 26,500/- was granted to the State Governments to subsidise these seminars.

### Examination Unit

The All-India Council for Secondary Education has decided to set up an Examination Unit for making a thorough study of the scientific methods of educational testing and appraisal. The unit will consist of one Deputy Director and fifteen Evaluation Officers. A pilot unit consisting of five Evaluation Officers started functioning from January 1958. Ten more Evaluation Officers who will man the full unit from July 1958 have been deputed for a training course of six months to the U.S.A. to work under Dr.

B.S. Bloom, Head of the Board of Examiners, Chicago University.

The unit will function in five regional centres viz. Allahabad for the north, Chandigarh for the north-west, Calcutta for the east, Baroda for the west and Madras for the south, and will work through the Extension Services Departments already established in selected training colleges in three regions. The Evaluation Officers will first take up work on the core subjects i.e. Languages, General Science and Social studies and will reorient teachers to think of examinations in terms of objectives of subjects and learning experiences. The material prepared by these regional centres will be co-ordinated and standardised at the central office of the unit at Delhi for use all over the country.

### Science Clubs

Central Science clubs have been organised at 23 Extension Services Departments and Science Clubs started in 72 Higher Secondary schools in different States. Grants amounting to Rs. 80,400/- were given to them.

### Secondary Schools Teachers' Extension Project

The All-India Council for Secondary Education received from the Technical Cooperation Mission, U.S.A., packages of books, screens, printing paper, transformers, multigraph offset machines, photographic offset machines, magazines and cartons of books and distributed this equipment to various Extension Services Departments.

# Diversified Curriculum and Vocational Preparation

ONE of the aspects of secondary education which has been discussed very often since the publication of the report of Secondary Education Commission is the curriculum. The Commission reviewed the existing system of schooling and found that the single track system of education in which all pupils had to follow more or less similar courses did not meet the needs of all. A school to be worthwhile for the community must provide various types of courses and activities that will satisfy and nourish the interests, aptitudes and abilities of all pupils. But under the present system of school leaving examination a student has to offer four or more compulsory subjects; he may also offer one or two optional subjects. Delhi and a few other School Boards have tried to introduce some amount of diversity in their courses but by and large the pattern mentioned above is the one followed in most parts of the country.

The two committees of Secondary Education in Uttar Pradesh presided over by Acharya Narendra Deva took note of this fact in the last decade. The second report (1953) reviewed the revised curriculum of 1948 in some detail. According to this scheme a school could offer "four types of courses: literary, scientific, constructive and aesthetic art, each catering for a particular class of students having special aptitude therefor." The committee, while endorsing their previous grouping, recommended certain compulsory subjects for all the groups. The Secondary Education Commission (1953-54) also recommended the introduction of diversified courses in the reorganised secondary schools.

This recommendation is significant as it seeks to remedy one of the major ills of our system. If we scrutinise the results of the school final examinations all over the country we notice that there is a colossal wastage of energy. A recent estimate given by the All-India Council for Secondary Education reveals that the countrywide average of failures in these examinations is fifty per cent. Many of these students fail in the examination because they are not prepared for it. They have to follow the same academic subjects whether they have an aptitude for them or not. Very often these 'failures' feel frustrated and consider themselves worthless. This is a serious matter for the community. To avoid this wastage the administrators and teachers

must join hands in giving all possible help to the students.

"The secret of good education" says the Secondary Education

Commission Report, "consists in enabling the student to realise what his talents and aptitudes are and in what manner and to what extent he can best develop them so as to achieve proper social adjustment and seek the right types of employment."

It is also significant because it aims at correcting the wrong emphasis on certain subjects which have attained some sort of prestige in the eyes of teachers and students. Since our methods of teaching emphasise the theoretical more than the practical, our pupils on leaving school find it difficult to get settled in a vocation. The large number of the educated unemployed bear testimony to this fact. The Employment Exchanges maintain long lists of applicants who want to be clerks but many technical vacancies cannot be filled because of the dearth of

qualified candidates. The introduction of diversified courses in the schools would widen the interests of the pupils and facilitate their future adjustment to a vocation.

### **Content of the Diversified Curriculum**

The suggested curriculum can be divided into two parts. The first part consists of a number of core subjects to be studied by all students, whatever the course of study they may select. The core subjects include (a) Languages (b) General Science (c) Social Studies and (d) Craft. Instruction in these subjects is intended to provide a background of general education for the individual so that he may function effectively as a citizen in a democratic society.

In addition to the core subjects every student is expected to take up a special course which may be helpful in determining his career in later life. The elective courses are : (a) Humanities (b) Science (c) Fine Arts and (d) Home Science.

Although the courses cover a wide range and the elective courses are of specialised nature, the purpose of each course remains primarily educational. The multipurpose school while catering to the needs of individual pupils differing in abilities, aptitudes and interests does not take the place of a trade school. It prepares students to face life confidently. If it does anything through the elective courses it supplies an element of bias for some subject or subjects, say physics, which the student may make use of when pursuing an academic course at the university or undergoing training as a radio mechanic. The school is concerned with vocational training only in so far as preparation for vocation is an integral part of education which helps the individual to grow to his full stature. In this sense it is in conformity with the philosophy of Basic education. These new subjects will help the pupil to develop into a cooperative, adaptable and responsible human being. The training received in this connection would be useful for those who want to

enter industry or a professional course.

As will be seen from the list of subjects under the elective category a single school cannot be expected to offer all of them. The number of elective courses a school can offer will be determined partly by the resources at its disposal but it will also depend on the local demand for a particular type of course. The needs of the different areas of the country are different and as such it will be necessary to make a careful survey of the community needs in different areas. The Five-Year Plans have made certain areas busy and prosperous by introducing long term projects. The schools will have to take note of these developments in their areas while formulating their programmes. To start with, a school can offer only one or two selected courses and several schools can cooperate in a planned programme for offering groups of subjects, carefully avoiding duplication of effort.

Since the diversified curriculum is intended to help each child in discovering his aptitudes it is necessary that the course is chosen properly for him. This means that educational guidance should be organised on a sound basis in the school.

### **Educational Guidance and the Delta Class**

The diversified curriculum is offered from the ninth class. The courses of study up to the eighth class are of a general nature. Psychologists have suggested that this year might be reserved for observation and exploratory activities. Such activities reveal to the teacher the presence or absence of the capacities, aptitudes and interests required in the pursuit of certain courses of study. These activities should be organised in relation to the diversified curriculum of the higher secondary classes. They may be part of the general co-curricular activities or undertaken through certain clubs like Art Club, Science Club, etc. These activities should be provided in the regular time table. Class talks explaining the nature of

courses of study should be given at regular intervals so that the pupils may choose their elective courses wisely. If there is no career master in the school one teacher should be given the charge of this *delta* class. He will be responsible for co-ordinating the results obtained from the evaluation of the exploratory activities as well as the regular school subjects.

At the end of the *delta* class the students have to be guided in the selection of their special subjects. There will be various tests like intelligence, aptitude, and achievement tests, but a counsellor would like to collect as much information about the child as possible. In addition to the test results, cumulative records and the teachers' estimates are to be taken into consideration. The cumulative records should include among other things temperamental qualities such as reliability, perseverance, initiative, speed of work, cooperation, etc. When all the information is available the counsellor will have to take into account the parents' wishes. It is quite possible that the parent wants the child to do a technical course for which he has absolutely no aptitude or even an inclination. In such circumstances one has to use all his tact to convince the parent that the child will be a misfit if the parent carries out his wish through pressure. Everything depends on the wise guidance given to the child who can make effective contribution to the life of the community only when he pursues a course of study commensurate with his ability, aptitude and interests.

### Preparation for Life

Under the existing system of education the secondary school curriculum is directly geared to the needs of the University. In other words the school gives them instruction that prepares them for a college career; it does not equip them for life. But the students going to the University constitute only a small minority of the total school going population. The majority of students who either leave off earlier or after completing school do not know what to do after that. The diversified curriculum is meant for both these categories of students. Secondary education will now be a self-contained stage of education. Students will receive enough general education to understand their neighbours and environment; they will also acquire some amount of specialisation in a group of subjects so that they can conveniently receive training which will make their placement in a job easy. The economic development under the Five-Year Plans has opened many job opportunities to the school leavers. Expansion of industry and establishment of numerous steel and other plants now require many technicians. The success of the national plans will depend on the availability of suitably qualified personnel for the various skilled jobs. The schools may not supply properly trained persons for this purpose but they can surely supply young persons who will have a healthy attitude to life and work, and also a capacity to profit from training that any technical or commercial establishment could offer.

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"Experience is the child of thought, and thought is the child of action. We cannot learn men from books."

—Disraeli

# Textbooks Are Important

THE last decade has been one of great change and a time when the foundations of an independent nation have and are being laid. Yet, isn't it surprising that our textbooks scarcely reflect any of this stirring activity? They do little to aid in building the new India, nor have they been affected by new and worthwhile educational trends. Why is this the case? Is it because our educational authorities and those concerned with educational matters have not appreciated in an adequate measure the importance of textbooks and their influence on the minds and habits of school children? To me it seems that textbooks should occupy the most important place in any plan of educational reconstruction, for whatever we may say about our teaching methods, or taking the pupils beyond the pages of the text and so

By

Mona N. Vergese

on, textbooks are still very important for they constitute the base from where both teacher and pupil may start and continue to work. Not only that. Textbooks are useful as guides in classroom instruction, particularly for the teacher. Teachers can use them to supplement their teaching to give another point of view or as a means of revision.

Now let us examine the kind of textbooks we study in our schools. The first thing to strike a person about them is their unattractive appearance. Their paper (how important tactile impression is the Montessorian will vouch for), the cover and the binding are not such that they can command good treatment and good care with the result that most textbooks in use are grubby and dog-eared and are usually thrown about. Besides, the printing is either too small or not clear and the pages are often so badly stitched together that they cannot be opened flat and so the last word or two of each line

on a page cannot be read for it cannot be seen. There is paucity of illustrations and diagrams and those that are there are far from being excellent. Colour is lacking and there is no attempt to encourage the aesthetic sense of the young users.

The second important point about textbooks is their content and its presentation. The content of our textbooks is often most disappointing for it tends to be stereotyped. The same material is served up time and again without any attempt at garnishing. Then, the language and style in which they are written do not improve them. Seldom is a textbook written with that personal note which makes the

reader believe the author is writing for him and him alone. Seldom is a book written in a simple enough language so

that words or construction do not serve as high hurdles. More often than not the students are unable to get the gist of what they have read without the aid of the teacher.

Take, for example, a textbook in science. Many Boards, recognising the importance of science, have made General science a compulsory subject for study in the school curriculum. Now the primary object of General Science is to arouse the curiosity of children by giving them the vision of things unbelievable, but what do our children get? Another dull subject and a textbook which makes no effort to galvanise curiosity, foster experimentation nor to emphasise the magic and the wonder of the subject. Much of the fault lies in the lack of good, stimulating diagrams and illustrations. Colour, which could be profitably used even for diagrams is absent. In short, students are expected to do the impossible, namely, to visualise badly described things without the faintest

conception of their actual appearance or form.

Or, you take the case of history and geography. Do textbooks in these subjects come up to any standard? I have found history books biased, emphasising the writer's point of view, the impress of his upbringing and his environment and reflecting his political affinity. Thus, instead of the study of movements only accepted characters and events are treated and there are often too many factual details and too little social history. The only new trend in the writing of history is the method of posing a question and giving the answer. This is but a glorified version of the bazaar notes which, I am sure, we all deplore. The source method cannot be used because of the dearth of materials. Maps, diagrams, charts, copies of treaties and proclamations, illustrations of peoples, buildings, coins, etc. are not available. The few that are, are not always accurate nor attractive. The same holds for geography textbooks. Geographical boundaries are so defined that they prevent a bird's eye view of the whole country, to say nothing of the continent and the world.

Our English prose books fare no better. Since Independence there has been a tendency to eliminate everything but Indian in the choice of our subject matter. The result is that the books give familiar stories which are repeated *ad nauseum*. The language and vocabulary in most English textbooks would sound foreign to an English child. Newspapers and leaders may say what they like, but I don't think that schools have a right to introduce what is called Indian English, a high sounding name for poor English. The English used is either too difficult or defective, not to talk of the many grammatical and vocabulary mistakes that frequently appear. The exercises given at the end of each lesson seem to have taken very little of the author's time and thought.

But perhaps the most glaring example of an uninteresting textbook is provided

by a textbook in domestic science. The books prescribed in this subject are only useful to the girl who, anxious to pass, finds sufficient material in them to learn by rote and pass. The facts which are given on the care of the sick, infants, diet, timetables and remedies are often such that only one per cent of the candidates have seen them in their homes or will use them in later life. First aid, of very great importance, is taught theoretically outside its setting with the result that a candidate asked to give first aid to a girl with a broken leg will leave the 'injured' to stand and will then go on to show how excellently she has mastered the art of applying a splint and bandages. Sewing is not artistic. Embroidery (what a variety of colourful and exquisite embroidery we have in the length and breadth of our country and what poor work is expected of these students in sewing examinations!) is dull and inartistic. Were cookery books to give even one recipe from each part of our country, a thick volume would be needed. Instead, the girls have a thin book for their guidance with a few recipes from a small part of the country. I would also suggest that when girls appear for cookery examination, they should come trained to work out any recipe, no matter whether it figures on their menus or not. Of course 'any recipe' would not include difficult items like flaky pastry or crisp, paper-thin *puranpolis* for they are an art and must be practised to be mastered.

The result is therefore that such uninspiring textbooks are used in an equally unimaginative way by both teachers and students. Often they are read from cover to cover, whatever the subject and nothing is added or omitted. The questions put to the class are the same, word for word as in the book, so that even the slowest and the least bright of the students can answer correctly for he will learn by heart the brightest boy's answer. This method is defective because it soon becomes mechanical. For instance, in an English prose textbook each paragraph gives a wide-awake teacher an opportunity to teach grammar, to extend the

active and passive vocabularies of the students and to give practice in oral compositions. But if the teacher is circumscribed by the necessity to cover the book page by page and line by line, how is she to exercise her imagination and proceed in the manner described? As a matter of fact I believe that in a prose lesson it is far more valuable to train the students to get the meaning from the context, by giving antonyms and by using the dictionary than by following every word and paraphrasing every line. Also, the mother tongue and the national tongue should figure as little as possible in an English lesson.

A reader will guess now what I am driving at. My contention is that before we talk of any reform in our educational system, the first thing to do is to concentrate on our problem of textbooks. And to have better textbooks I would like to stress three points—(a) we must choose our writers with great thought and discrimination; (b) training colleges should take a hand in this reform and (c) government aid is necessary.

The most important of these three suggestions is the first. If textbooks are unsatisfactory it is the fault of the writers, often men of great learning and standing but without any first-hand or recent knowledge of schools and their standards. Also because many of them have been nurtured on the pedantic, scholastic style, they cannot write in any other way. It is, therefore, essential to see that persons who write textbooks are the right kind of persons who combine scholarship with experience and knowledge of schools and their needs. Secondly, I would suggest that our training colleges who have so far done little work in this direction should take a hand in this reform and suit their training programmes to meet the challenge.

Lastly, because the cost of writing, printing, illustrating and publishing is too great to permit attractive books (both in appearance and content) being brought out at a reasonable cost by private publishers, it is necessary that Government should come forward to give aid to this enterprise.

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"There is the love of knowing without the love of learning—a beclouding which leads to dissipation of mind".

—Confucius

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# READER'S FORUM

## EDUCATION AND EMPLOYMENT

By

S. Natarajan

*Who, in this second series of discussion on the subject, expresses views directly opposed to the views of Shri J. S. Gulati who initiated the discussion in the last issue. The question before us is—to what extent should secondary schools prepare a student for an occupation at the end of his secondary school career? In other words, is secondary education primarily a general preparation for life or is its main purpose to train a student for a particular job and provide a school curriculum so planned that it gives boys and girls experience and skills which will serve to fit them to fill a certain position in life?*

*Our readers' comments which must be brief and to the point, are invited. These should be typed and addressed to the Editor, "Secondary Education", Ministry of Education and Scientific Research, New Delhi.*

IN his article in the Reader's Forum under the caption 'Education and Employment' in the last issue of this journal, Shri J. S. Gulati has stated that education must assist every student (i) to discover his interests, abilities and potentialities, (ii) to study the requirements, opportunities and conditions of work of different occupations, (iii) to make a careful choice of an occupation, and (iv) to prepare him for the selected occupation by providing him with work-experiences to develop his abilities, talents and skills for his future job. These functions of education may appear to be acceptable, but one has to go deeper into their implications, particularly of those under (ii), (iii) and (iv). Is it really the function of secondary education to enable the students to *study* the requirements, opportunities and conditions of work of different occupations? Again, is secondary education really concerned with helping the students to *make a careful choice* of an occupation or to *prepare* them for the selection occupation by providing them with work-experiences that would develop their

abilities, talents and skills for their future job? My answer is 'No'.

It is necessary to have a clear conception of the purpose of secondary education. In our country secondary education is sometimes understood to mean education from the age of 11 to 17. But, according to recent interpretations, it is intended to cover the age group 13 to 17, especially as the Constitution requires free compulsory primary education up to the age of 13. It is well known that, in the absence of compulsion and of a generous provision for education, we have only about 50 per cent of the children of the age group 6 to 11 in our schools; and of these a very large percentage discontinues schooling after completing the primary course of five years. At the end of the middle stage there is a further drop-out, so that we have hardly 5 per cent of the pupils of age group 13 to 17 in our secondary schools. While there is no rigid selection of pupils fit for secondary education, a natural process of selection is in operation, created by economic

factors and the inadequate provision for facilities for education of this type. The country has to look to this small group of pupils for its leadership requirements, whether it be leaders of the top rank or of the type of non-commissioned officers in the army. These pupils are expected to have certain basic qualities such as a sense of responsibility, initiative and ability to think, weigh evidence and come to right conclusions.

If these basic qualities are to be fostered, secondary education should take the shape and character of general education rather than of any specialised preparation for any particular job. Imparting specialised vocational training to young pupils before they have attained a certain maturity of mind would impair the quality of that education. Under present circumstances and also in its future programme, education at this stage cannot subordinate itself to vocational needs. It must keep in view the broad purpose of general education. It must therefore provide a curriculum which will develop the qualities and abilities mentioned above.

It is argued that after completing the high school course a student must be able to engage himself in a gainful occupation. No one will probably question this requirement. But the question is whether preparation for a gainful occupation should be provided by secondary schools in the limited specialised way suggested, or whether the schools should not discharge this responsibility by giving the broad basis of general education so that the pupil is equipped to choose for himself the necessary job and undergo any specialised training that may be required for the purpose.

It must be admitted that all students cannot profit by a purely literary type of education. The mental make-up of some children is such that they cannot deal with things in the abstract but are able to understand and appreciate only through concrete media. The exclusively literary character of the education given

in our secondary schools has been spotlighted by the Secondary Education Commission. In its report, the Commission has recommended that, in addition to a broad general education, the curriculum should provide for a number of electives including subjects of a practical nature, so that the students may choose according to their interest and ability, one or the other of these subjects and thus secure through concrete experiences the knowledge and skills necessary for their mental development. That is the main reason for the provision of subjects like Technology, Agriculture, Fine Arts and Home Science in the list of diversified subjects in the new pattern for our recognised secondary schools. The inclusion of crafts is also intended to provide valuable learning experiences. In this case too, the purpose is not to develop technical skill required for producing articles of quality but to provide a medium of expression for releasing creative talents.

It is no doubt good if students leaving the secondary school are acquainted with the different types of occupations available, and the abilities and skills required for the same. But it is not proper to expect the schools to make arrangements for the training that would develop the skills and abilities needed for these jobs. This is a task which is beyond the capacity of the secondary schools and which will certainly detract from the main purpose of secondary education.

Shri Gulati's argument that the large number of educated unemployed in the country demands that education should be geared to a vocational purpose, does not convince me. Secondary schools may have failed in their purpose, but the remedy suggested is worse than the evil. India is a country of teeming millions. The land does not provide occupation even for 15 per cent of the people; and the remaining have to seek jobs of other types. As the country is not industrially developed, there is a very large amount of unemployment and educated unemployment is only a part of the total unemployment problem. Many of our educated

youths are unable to find suitable jobs of their choice because there are so few openings for all these people. What is needed is to gear the programme of vocational training to be imparted to young people at different age levels to growing requirements of our country so that trained personnel will be available

for the industries as and when the industries develop. Tinkering with the problem of secondary education and subordinating it to the requirements of employment will lower educational standards still further and deny the country the benefit of leadership so badly needed both at the junior and senior levels.

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"It is better to stir up a question without deciding it than to decide it without stirring it up"

—J. Joubert

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# PLACE OF MENTAL TESTING IN GUIDANCE WORK IN INDIA

Baqer Mehdi, Counsellor at the Central Bureau of Educational and Vocational Guidance, holds the view that mental testing has an important role to play in guidance work in this country or for that matter in any other country. But he points out, people must take a balanced view of its role, that is, they must be aware of its limitations even as they are aware of its uses. In this article he makes an attempt to dispel some of the wrong notions that some test users have as to the power of these tests to diagnose, i.e., to describe the present status of the individual and to foretell the prospects of his future growth in a variety of situations or fields of activity.

TESTING movement in this country is of very recent origin. In point of fact it may be said to have been born with the birth of New India. Before that, interest of a purely theoretical nature used to be taken in tests as a device for testing intelligence and some other loosely defined abilities. During the Second World War a few Indian psychologists had collaborated with the foreign psychologists working on the War Services Selection Board in constructing tests of aptitudes for the selection of military personnel. For the general

public the tests were still something like magical tools used by psychologists to 'read' the minds of the people. Psychologists to them were specially gifted people who had powers which only magicians could be supposed to wield.

Interest worthy of mention in the use of tests for giving educational guidance to pupils seems first to have been shown in this country during the late thirties. The Acharya Narendra Dev Committee report on the re-organisation of Primary and Secondary education which came out in 1939 bears ample testimony to the fact. There it had been recommended in very clear terms that new agencies had to be opened which could take up the work of guidance by devising psychological tests and adapting other

necessary procedures. Nothing could however be done in practice for the eight years that followed the publication of this Report. But with the achievement of freedom in 1947, a bold and pioneer step was taken by the U.P. Government which right then established a Bureau of Psychology at Allahabad. One of the main functions of the Bureau as stated in one of the pamphlets issued by the Bureau was, and still is, "to construct

and standardize tests of intelligence—group as well as individual, verbal as well as non-verbal, applicable to people from all strata of society" and also "to construct and standardize tests for different special abilities and aptitudes and thus to establish the practice of educational and vocational guidance on a sound basis."

The work of test construction by the Bureau has continued since then and by this time a number of tests have been constructed and put to practical use in guidance work with appreciable amount of success.

The interest taken in test construction work by the State of U.P. proved infectious. Other States began to follow suit until the Government of India itself established a Central Bureau of Educational and Vocational Guidance of its

own in 1954. Since then quite a few States have opened their own Bureaux. It is interesting to note that each one has started with some work in test construction.

While the work goes on there have been voiced from time to time some apprehensions with regard to usefulness of tests as a device for diagnosis and prediction. Under the influence of the left-wing school in Great Britain and the United States which has decried tests both on psychological and social grounds many of us in India have at times expressed unbalanced views about the practical utility of psychological tests and have levelled some unwarranted criticisms against them. Voice is heard from some corners that when in other countries (and by that they generally mean Great Britain and the United States) people are losing faith in tests, India is going ahead blind-folded with the programme of test construction.

While much that is being said in this direction is definitely ill-founded and is often based on some mistaken notions about the weaknesses of a testing programme, it has surely one good point, which is, to give a somewhat rude shock to those who have been putting blind faith in tests and have been regarding them as infallible tools in prediction work, thereby doing more harm than good to the whole movement of testing.

It is time now that all of us who are engaged in the construction and use of tests in guidance work should pause and think about the nature of these tools and try to understand and appreciate their role in a programme of guidance.

### Tests are 'guides'

Tests however objective and valid they may be, it is important to realise, can never diagnose an individual with all the uniqueness and dynamism about him, nor can they predict an individual's future chances of success with the accuracy of an astrologer if at all such an accuracy exists. No static and time-bound tool can ever hope to measure a dynamic and growing organism with any-

thing more than a probability. No final judgments as regard to the future possibilities of an individual in any given field can ever be passed on the basis of the results obtained by such tools at any given time.

The two terms so often used in connection with tests, namely 'diagnosis' and 'prediction' have more often than not been completely misunderstood. Kitson has forcefully expressed the misgivings of many psychologists concerning the use of the latter term when he says : "Once we recognise the influence of any or all of these (personal and situational) factors on the vocational success of an individual, we must acknowledge how futile and presumptuous it is to administer a few tests to an individual and from his scores to attempt to foretell his eventual success or failure." On this point William James also made a very interesting observation some 70 years ago : "It is safe to say that individual histories and biographies will never be written in advance no matter how evolved psychology may become."

This is not at all a tirade against tests. Nor does it purport to say that tests have no value in a programme of guidance. Their value has time and again been demonstrated on experimental basis and seems to be beyond doubt. What actually the two statements say in effect is that "a person's actions are determined by a great variety of forces, some of them residing within the individual, some of them essentially part of the environment" and tests being limited in time and scope can never either diagnose or predict in the sense in which the two terms are usually taken to mean. Horst in his 'Prediction of Personal Adjustment' has discussed these personal-situational factors in some detail. He calls these factors contingency factors. They are those factors "which affect performance but for which the probability of subsequent presence or absence is not known at the time of prediction" (Super).

The true meaning of prediction may thus be taken as 'estimate'. What tests can predict is at best only an estimate

or approximation, its value depending on the amount of correlation between the predictor and the criterion, and also on the validity of the criterion itself.

Tests can thus serve only as our guides and can never be used as some unfailing instruments to foretell the future.

As for diagnosis, tests again are helpless to give a true and complete picture of an individual at any given time. The reason lies in the very nature of their composition and the method of construction. Test items, as every one of us knows, represent only a sample of known human behaviour pertinent only to a given population in a given environment at a given time. To say on the basis of test results that an individual has or has not this or that quality one has to make certain assumptions and should feel sure about the propriety of making them. The most important assumption, if one has to pass anything like a final judgment about an individual's mental capacities on the basis of test results, is that the individual has been afforded an optimal environment to grow and to make use of his capacities. Interests and aptitudes, it must be realised, do not show themselves in a vacuum nor can they get a chance to develop fully in a poor and restricted environment. Tests can judge a child only on the basis of what the child has achieved in actuality and predict future success only to the extent the future conditions remain constant, which is only rarely so. Conditions of life change and often improve and with that the chances of an individual's making use of his capacities also increase. New patterns of behaviour appear and abilities find a chance to show themselves in a variety of ways. In a country like India where the great majority of the people are uneducated and where the educative environment of the child is still too restricted to allow anything like a full development of human capacities, passing judgment on the basis of test results would be no less than a crime. Take a concrete example. A child who has never seen a lever and a pulley working in conjunction cannot by any means comprehend the meaning of an item

included in a test of mechanical ability, what to speak of doing it correctly. Or, to take another example, a child who has had no opportunity of studying geometrical shapes and designs and has not learnt how solid cubes are represented in drawing will certainly prove himself a fool on a Form Relation test. To conclude from their test results that one does not have a mechanical aptitude and the other is low in spatial ability is a folly which betrays an unscientific approach and is harmful to the extent it has its damaging effects on the life of the child. It must be constantly kept in mind that tests do not and can never reveal some innate qualities of the mind lying hidden, as it were, in some of its remote corners. Test items sample the universe of child's experience in an environment common for a given population and try to find out, by comparing his results with others of the same population, how best a particular child may utilize that environment in future. A test does not and can never work in a vacuum.

### Taking a balanced view

The above observations suggest the following conclusions,

- (1) Tests supplement, not replace, other devices for diagnosing the child.
- (2) Their predictive value is a relative thing and must be understood as such.
- (3) Test scores must be interpreted in the light of other data gathered from other sources about the child.
- (4) Local norms for the tests being used must be developed and individual scores have to be interpreted against such norms.
- (5) Norms need to be revised at intervals so that any advance made in the educational and social level of the community is fully taken account of.

Therefore one may safely say in the end that tests can be used to great advantage in a guidance programme provided their limitations as pointed out in this article are constantly kept in mind and necessary allowance is made for them while interpreting the test results.



## How I Teach It

### TEACHERS' SYMPOSIUM

In this feature we invite teachers of secondary schools to discuss the teaching of their subjects and exchange ideas about their methods of teaching, classroom practices and any other interesting experiences they may have had in or outside the classroom. In the last two series we have discussed the teaching of Social Studies, Mathematics and Science. In this series the discussion is on the teaching of English. Mrs. Mina Swaminathan of the Municipal Girls Higher Secondary School, New Delhi, talks of her personal approach to the subject while Miss M.A. Dastur of the New Era School, Bombay, gives an account of the teaching methods practised by all teachers of English in her school.

#### Mina Swaminathan

BEING a teacher of English in India today is a stimulating experience. It is a challenge to think of new ways of teaching which not only impart the necessary language skills but also serve the wider purposes of education. Below I would like to describe some procedures which have been enjoyable to pupils and useful in creating interest in the subject, self-confidence and independent habits of work and thought, and in allowing individual students to work at their own rates and according to their own abilities. The building of the essential language skill through oral drills and written exercises and the reading and discussion

of texts must always take up the greater part of classroom time, but there is a great deal of extra work that can be done, and it is here that I have found assignments which pupils can work at either individually or in groups, of value.

The assignments I have used have been of two kinds—the first intended for detailed textual study and the second for wider studies related to the text. An assignment of the first type which was recently used was meant for a detailed study and revision of the "Ascent of Everest" which forms part of the syllabus for the Higher Secondary Examination in Delhi. The students had already read the book once through. They were divided into three

teams, each with a leader and each group was given one-third of the book to work on. A set of questions aiming at collecting and grouping different kinds of information was given to each group. A sample assignment given to one group is given below.

Prepare a report on the following lines :

1. Maps and diagrams showing the route from Base Camp to the Summit.
2. Where were the different camps placed and why ? Describe the special difficulties of each portion of the route.
3. Describe the work of the ferries—how long they took, how they were organised, their difficulties etc.
4. Describe how the climbers found and prepared a route up the Icefall from Camp 1 to Camp 3.
5. Who prepared the route from Camp 3 to Camp 7 and how ? What choices did they make ? What difficulties did they meet ?
6. What were the plans for the attack on the Summit and what preparations were made for it ? How were the tasks divided ?
7. Describe how the route from Camp 7 to the Col was made and how the stores were moved up.
8. Explain the following ; Cwm, icefall, glacier, crevasse, boulder, ridge, saddle, face, spur, step, pinnacle, shelf, crampon, ice-axe, flags, hand rails, trough, Nut-cracker, Nupise, abyss, assault, Base Camp Col. (Use diagrams where necessary).
9. Compose and present a short scene or dialogue from these chapters.
10. Prepare a quiz or puzzle on these chapters that can be given to the rest of the class when your report is complete.

With this assignment to complete, the group would have to read and re-read the same material several times over, each time from a different point of view and bearing a different question in mind, thus

extracting as much as they could from the text. Most of the information was contained in the text itself, though of course, limited use was made of dictionaries and reference books. Thus the assignment included maps and charts, explanation of various technical terms used in the text, and a short dramatic scene to be composed and presented from the portion studied. The group leader was made responsible for allotting the tasks among members of the group, and for compiling the results in the form of a small booklet. Children could thus tackle different amounts and types of work according to their abilities. An important task for each group was the preparation of a puzzle or quiz on the portion studied. This was given to the rest of the class to solve after the group had presented its report, the ease with which they were able to do so being an indication of the group's efficiency in gathering the material and their skill in presenting it.

About a week was allotted for the preparation of the reports. Most of the work was done by the children at home or in their spare time, though one class period at the beginning and one at the end were given so that work could be distributed and collected, and so that I could help them when necessary. Each group was given a full period of 45 minutes to present its report. As this was a new kind of experience for most of the class, the reports, though effective were sober, consisting of reading out of answers, using maps and diagrams where necessary to explain. I have found that children familiar with this kind of work, particularly younger ones, like to indulge in dramatic, lyrical and sometimes musical forms of presentation.

The second kind of assignment I have used has been built around rather than on texts, and involves the use of all sorts of additional materials from newspapers and magazines to encyclopaedias and dictionaries. It aims at widening the knowledge of pupils, training them in habits of reference and stimulating critical thought. One such example grew out

of the study of the play "Philemon and Baucis", also a part of the syllabus for the Higher Secondary Examination. The numerous references in the play to the Greek pantheon were unfamiliar to the children, so we began by drawing up a list of the names and roles of Greek gods and goddesses and compared them with the nearest Indian equivalents. The class went on to collect samples of Greek myths and legends and compared them with their parallels in Hindu mythology. Each child had to write down the story of a Greek myth, and next to it an Indian story comparable in theme, if such a one could be found. In any case, everyone had to find an Indian story similar in theme for "Philemon and Baucis" as well as one dealing with the origin of something. Some of these stories were read or told in class, and we went on to discuss similar themes in the mythologies of different countries, the mythological origins of festivals, popular superstitions and natural forms.

Similarly, an extract from "Nicholas Nickleby" dealing with a notoriously unsatisfactory type of M.P. led us to ask the question—what should an ideal M.P. be like? To answer this, we had to know something about the rights and duties of an M.P. This led to a study in outline of the work of Parliament in general and individual members of it in particular, the relationship between the Cabinet, the Parliament and the public and so on, guided by the questionnaire given below:

1. The three main parts of the Government are the Executive, the Legislature and the Judiciary. Briefly describe the duties of each.
2. How is a law passed in Parliament?
3. What is the Budget?
4. What are the important sources of Government revenue?
5. What are the important items on which the Government of India spends money?
6. What has Parliament to do with the Budget?
7. How else does Parliament have

financial control over the Government? Give some examples.

8. How is the Cabinet selected, to whom is it responsible and for what?
9. Why do Ministers resign? Give some recent examples.
10. What happens if Ministers disagree?
11. How does Parliament control the Executive?
12. What is Question-hour? Of what use is it?
13. What is a Whip? What is the duty of a Whip?
14. What is a "back-bencher?"
15. What are the duties of an individual member of Parliament who belongs to (a) the Government Party (b) the opposition party and (c) to any other party or is independent?
16. How does an M.P. vote?
17. What duties does an M.P. have towards his constituents?
18. How can the public get in touch with M.P.s?
19. How does the public influence Parliament?
20. How else can the public influence the Government of the country?

To tackle this assignment, the children divided themselves into groups, each undertaking a portion of the task. Most of the answers had to be gleaned from newspapers and journals, a job which proved quite difficult for many. It ended, after the answers to questions had been found and shared, in a discussion on the qualities of an "ideal M.P." and a clearer understanding of our Government and of the fact that democracy means more than the "it's our country now so we can do what we like" attitude.

Most of this kind of work has been done by pupils at home, though it begins and ends in the classroom. For me, this has been a reflection of the belief that homework should not attempt to be a repetition or continuation of classwork but something entirely different in its nature. I believe that it should be either

a study planned to cover old ground in new ways, to gain new insights into things read or heard or written in class, or it should be an exploratory and imaginative, if possible, a creative venture taking off, as it were, from the solid foundations laid in the classroom lesson.

Work of this kind gives children practice in reading, writing and speaking English. The assignments require both wide and intensive reading with a careful search for meaning, the use of dictionaries and reference books, and at a later stage, reading aloud. They give practice in condensing and rewriting material in one's own words, ensuring that there will be a minimum of mistakes, since dictionaries and texts can be freely used. Oral work, whether it is merely reading, or free discussion or drama, proceeds with greater confidence and success, as the students feel quite at home on well prepared ground. Such assignments have been valuable, not only from the point of view of achieving the general educational aims I have mentioned earlier, but also as an aid to the process of language learning.

## II

### M. A. Dastur

For my purpose I should call this feature "How We Teach It" for, in this article I am going to talk about some methods of teaching which we teachers of English in the New Era School follow in the teaching of our subject to different classes. Of course I need hardly add that we may vary our methods—and we do vary them—to suit the different age levels and requirements of our groups of pupils.

What is our aim in teaching English in Secondary schools? First of all there is the very practical consideration that we prepare the children for University education and the medium in most Universities is still English. Moreover English is the language through which new developments in Science, Technology Economics, History, Politics are going to reach us. So we want our children to

develop facility in reading books, journals and magazines in English. Thus English has become a language in which the emphasis is no longer on expression, whether in writing or speaking, but on comprehension.

Now the first step toward this end is to build up a carefully graded library containing not only story books but books dealing with scientific and historical subjects; books on birds and animals and plants. These, as far as possible, should be beautifully illustrated books. A carefully selected library plays a very useful part not only in the comprehension of the language but also increases the general knowledge of the child. We must also ask children to keep a record of the books they read.

Another effective method of teaching English, and one which is quite common in our school is to make children listen to selected series of radio talks in the A.I.R.'s School Broadcast Programme. This is not as easy as it seems. As the children are not used to listening to talks in English they are restless. But if the teacher has carefully prepared the children for the talk, majority of them learn to be attentive. Listening to school broadcasts in English gives the children practice in understanding spoken English covering a variety of subjects and spoken by different speakers. It is also necessary to do follow-up work in this direction. We ask children to make a note of the talks in their books. Besides this, each class brings out a magazine at the end of a series of talks. For this they have to do a good deal of extra reading on the subject before writing the essays. They illustrate their composition with pictures and charts. Reporting the talks and choosing the best of these for the class magazine serves as a composition exercise with a practical incentive. In this way, interesting class magazines have been prepared on such subjects as Hans Anderson and His Stories, Man learns to Write, Count and Measure, The Shrinking World, The United Nations and its Agencies, Tales of Gods and

Heroes (Classical tales of ancient Greece and Rome), Fighting the Desert, etc.

Dramatising the lesson is one of the most stimulating methods of developing a language sense among pupils. From time to time the children of our school stage plays based on lessons from their textbooks. Last year the children staged a small play called "The Pied Piper of Hamelin" based on a story in their textbooks. We have had other plays too, such as "Twice is too much", "Robin Hood" and "White Washing the Fence." Since the children's main interest in English now is to learn it as the language of information, we sometimes write plays on topics related to science or history. For example, a play entitled "They Also Serve" dealt with Simpson and the Discovery of Chloroform. Another playlet was on Newton's life and discoveries. In all this our attempt is to use the children's interest in science as an incentive to language study.

Besides the acting and production of playlets, we have poetry recitals during our Assembly programmes. These consist of recitation of individual poems as well as chorus recitations. Greater emphasis is laid on the latter as it gives the whole class an opportunity to participate in rhythmic expression. Sometimes the whole recital consists of the poems of a particular poet or poems relating to a particular topic.

Debates are another form of expression work which stimulate speech as well as thought on different topics. Some of the subjects discussed in our debates have been "The release of atomic energy is a curse to mankind," "The Writer is of more value to Society than the Soldier."

Finally, we believe that foreign language teaching has a cultural as well as a utilitarian purpose. It should therefore be linked up with its background and the special cultural contribution of that foreign country. We try to bring out this cultural aspect of English language teaching by means of illustrations of all kinds, particularly classroom pictures, epidiascope talks, films, poems and stories, talks by foreign visitors, radio talks. The English background is used, not as a key to England alone, but to Western civilization generally. Among such currents of English and Western thought that are brought out at various stages are: Home and School Life in England and America, Ancient Greece and Rome as the Source of European Civilisation (brought out through classical stories and legends), England as the Mother of Parliaments, Ocean Voyages and Scientific Discoveries of the Renaissance, the Industrial Revolution and London as the World's first industrial town.

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"My memory is the thing I forget with."—A child's definition

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# AIDS TO THE STUDY OF CAREERS

By

Evelyn Marr

TO put guidance programme on a sound footing it is particularly important to find effective ways of working towards the objectives of 'guidance'. Whether it is to study students or to provide educational and vocational information to help in their planning, or to aid their growth and adjustment, we have to select carefully our techniques and critically examine the outcomes. This is not to say that we can find one "best method" but rather that we need to give careful consideration to the combination of aids and tools to use, the emphasis to give to each and the ways of continually improving our use of these techniques.

In this article I propose to discuss briefly some of the procedures that have been tried in various guidance programmes, to point out their limitations and to offer a few suggestions for their implementa-

tion. My account of these procedures will be limited to ways of disseminating educational and vocational information.

## The nature of our problem

In helping students to learn about occupations we have an advantage over other areas of study. The subject matter is not circumscribed by courses prescribed for examinations, and is directly related to the problems students are facing, or are likely to face. But the lack of a syllabus places on the counsellor the entire responsibility of planning a balanced course suited to the needs of the group. This is specially difficult because students differ in their abilities, interests and problems, and what is more, they often do not appreciate the need or importance of such information even though it is likely to be of use to them. Therefore in

A Career poster brought out by the Central Bureau of Educational and Vocational Guidance

**OCCUPATIONAL OPPORTUNITIES FOR STUDENTS OF  
EDUCATION & SOCIAL SERVICE**

HIGHER SECONDARY/MATRIC		GRADUATE	
SCHOOL TEACHER		COLLEGE PROFESSOR	
VILLAGE LEVEL WORKER		LIBRARIAN	
MATRON		ARCHEOLOGIST	
PROOF-READER		LAWYER	

any programme arranged for a group there will always be topics which some members feel are a waste of time for them to study. It therefore requires considerable ingenuity and resourcefulness on the part of the counsellor not only to plan a worthwhile programme but also to keep the group interested. Now there is no ready-made prescription for achieving this, but I do believe that by following certain guiding principles like beginning with a field of work in which a majority of students are likely to be interested or by following a technique that would require their active participation or by introducing variety in the programme, we would be working in the right direction.

### Career Conferences

By its very nature a Career Conference is an authentic medium of imparting vocational instruction because in a career conference representatives of various occupations are invited to speak to groups of students. It thus enables the students to get first-hand up-to-date information from people who are actually in the field.

But a career conference has its limitations and it is important to be aware of them. Firstly professional people are usually invited as speakers, for it is not very practicable, particularly in our country, to invite say fitters or machinists to address an audience of high school boys. The conference may therefore have the effect of limiting the horizon of students rather than widening it. Another problem is that most of those invited to speak are not used to addressing groups of adolescents and their talks may be above the heads of the students. Then there is the chance that the information may be biased because of the speaker's own peculiar circumstances and attitudes, and this may affect the children's attitudes towards the job he represents.

To some extent these defects can be remedied with a little care in the choice and briefing of speakers. Our experience in Delhi has brought home to us the

desirability of inviting as far as possible those who could speak in the mother tongue of the students. It is also necessary to remind them that the audience is composed of school children and request them to express themselves simply. An outline of the talk, or a list of questions to which the boys would like answers, should be sent in advance. This will keep the speakers from rambling and indicate to them the points in which the boys are interested.

The possibility of the information being misleading is not as serious as it appears for the counsellor can later discuss the conference and correct erroneous impressions whereas there is no opportunity to correct the impressions formed by students through their contacts with people outside the school.

The determining factor in the success and usefulness of a career conference is the amount of student participation. This could be achieved by consulting the students in the choice of topic and enlisting their cooperation in drawing up the outline or list of questions to be sent to the speaker.

### Group Conferences

In a Group Conference a representative of one occupation is invited to speak to the students and the talk is followed by a general discussion. Such a conference is simpler and easier to arrange. Students are also likely to benefit more from a series of group conferences than from a career conference, for they can but assimilate a certain amount of information at a time. The risk is that our school calendars being as full as they are, the programme may be discontinued after one or two meetings.

### Class Talks

This is a method we are trying out in Delhi. Instead of inviting outside speakers the counsellor discusses a field of work in a class period. This method has one

drawback in that a counsellor cannot give first-hand knowledge about an occupation. But, on the other hand, from an administrative point of view a class talk is easy to arrange and it causes the minimum disturbance to the school time-table. Another important advantage is that students feel more free to ask questions and join in the discussion than they would with a stranger. The counsellor is also in a position to know what points need to be emphasised with regard to the problems the students are facing, and where necessary he can lead the discussion so as to modify attitudes.

### Films and Filmstrips

Films and filmstrips help to arouse interest in the study of occupations. On the whole filmstrips are found to be more useful. They contain fewer irrelevant elements. Besides, children have time to look at the pictures carefully and the counsellor is able to comment on each picture and point out important details. The commentary for a filmstrip has to be carefully prepared. In fact a filmstrip is better used if it is considered as illustration of a talk rather than the talk as an appendage to the filmstrip. To this end it is desirable to precede the showing of a filmstrip by a review of the field it covers. This should be in addition to the commentary and not a substitute for it.

Films are as a rule welcomed by children and therefore have their own contribution to make to the programme. They are particularly valuable in dealing with occupations in which it would otherwise be difficult to get the children interested.

Motion pictures may include documentaries or feature films. Documentaries are usually prepared with the intention of imparting information and therefore do so more effectively than feature films, and the information contained in them is also more accurate.

### Displays

A display or exhibition of material may

be used to arouse interest in vocational information or any other aspect of the guidance programme. Although it is usually not possible to give detailed information through a display, certain basic ideas can be presented simply and clearly, and at the same time it can also be useful in directing students to other sources of information.

The trouble is that too often a display turns out to be a hodge-podge of all available material. One may find a chart showing the relationship of school courses to occupations along with one giving the qualifications required for the work of a draftsman, which in turn is followed by a picture of a pharmacist at work. Though each of these is valuable in itself, this presentation of many diverse ideas without any system, often results in the students failing to grasp even one. If, on the other hand, the eye follows a line of thought as it travels from chart to chart the display is likely to create a deeper impression.

Once again the most important consideration to bear in mind is the necessity of student participation. Students should play an active role in planning the display, in collecting material for it, preparing charts etc. and putting them up. In doing so they are likely to learn much more than by merely gazing at the best of displays arranged for them.

### Visits

Visits to work sites or institutions of higher education and training are probably the most effective way of helping students to absorb information, but the difficulties involved in organising them have so far deterred us from the use of this method. To begin with, adjustments have to be made in the school time-table to provide sufficient time for a visit. Then arrangements of transport etc. mean considerable trouble and responsibility for the counsellor.

But despite obstacles, it is worthwhile to arrange visits whenever possible. In

This way learning takes place effortlessly, and vivid and lasting impressions are made. Besides some aspects of working conditions e.g. the noise and humidity in certain factories can only be learnt by actually being there. What is more, the information gathered is accurate, up-to-date and without bias.

Before organising a visit it is necessary to make sure that it will be worthwhile. For this I have to stress two points—(a) it should be a place of work where at least some students are likely to enter later and (b) students should be prepared for the visit, that is, they should be given a brief description of the kind of work done and told to observe the workers rather than the machinery. Where applicable it should be impressed upon them to observe safety precautions.

To enable the students to get the full benefit of a visit it should be followed by a discussion of the jobs observed. This will provide an opportunity for them to compare their impressions, to consider how typical are the conditions they have observed, and most of all if they would like to do any of the jobs, and if they feel they have the ability to do them.

### General remarks

Most of the procedures described so far would serve chiefly as an introduction to various fields of work. However no

information programme is complete unless there is a provision for the study of occupations by students themselves. The students may work individually or in small groups so that each boy is studying the occupation or occupations of special interest to him. They should take the major responsibility for collecting information from all possible sources, while the counsellor serves as a guide and provides reference material.

The various methods that may be employed have by no means been fully covered by the above account, and to those actually in the field new ways will always suggest themselves. But it is well to remember that, even though variety is to be welcomed up to a point, it is not a good practice to try too many techniques with one group. The counsellor should rather select one or two according to conditions and try to carry them out well.

Finally, no information service however good is likely to be of much benefit to students unless it is part of a fuller programme of guidance. There needs to be provision for the study of individuals and for counselling interviews to help them to relate the information about occupations to their own abilities, interests and circumstances. It is only within the framework of such a programme that the knowledge of occupations gained by the students will be of value to them.

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"It is struggle against nature and not conformity to nature that makes man what he is."

—Swami Vivekananda

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# From Our School Notebook

We publish below accounts of individual projects undertaken by various schools. Contributions (which should be typed) for this feature are invited. These should be addressed to the Editor, "Secondary Education," Ministry of Education and Scientific Research, New Delhi.

## I

**Teaching Through Projects in the Middle Classes** By Kamala Bhatia, Principal, Municipal Girls Higher Secondary School, New Delhi.

I have found many teachers and parents complain about the overcrowded syllabus and the large amount of subject matter that a child in the middle school is expected to cover. But if I were to express an opinion based on my personal experience and observation, I would say that most of the textbooks prescribed for the middle classes in various subjects like Social Studies, Everyday Science, Language, English and Mathematics are characterized by paucity of subject matter, restricted themes and a sketchy presentation of material. I would therefore suggest that much of the time that is spent in many schools on drill and repetition of the few items in the syllabus could be better utilised by allowing the topics of the syllabus to flow out, and embrace other allied topics, arising out of the child's life at school, home and in the neighbourhood.

A teacher with a lively sense of humour, a human outlook and a feeling of freedom to handle the course takes her class naturally and automatically

out of the pages of their textbook into the regions of wider experience. Indeed it is my belief that if we are to adequately meet the needs of all pupils, both bright and backward, we have to find ways and means to keep them fully occupied, their minds engaged in some arresting problem and their hands in making something really interesting and worthwhile. The cynic may smile and ask "but what about the examination?" The answer to this question is that in the middle school we have only internal examinations to cope with, and therefore at this stage we have plenty of scope to go off the beaten track in pursuit of the larger aims of education, namely, that of making the pupil an intelligent and wide-awake citizen through the knowledge we impart and our methods of imparting it.

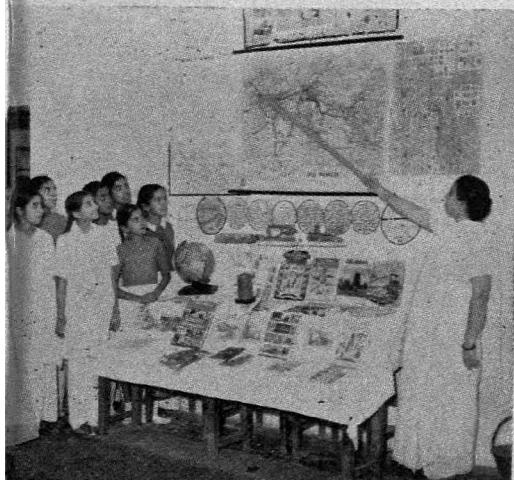
In our school we have tried several projects with excellent results. In this article I will give an account of one of these projects—the postal system.

### How the idea originated

The idea of this project originated in an interesting manner. One of the pupils in class VI received a letter from her brother in West Germany. It was an unusual envelope with some striking stamps on it. Some of her friends wanted these stamps and there was some excite-

ment over them in the class as there were many girls who were interested in stamp collection. This, however, happened to be the Hindi period and the teacher did not like this excitement. She thought of taking away the letter but seeing how disappointed the girls looked, she decided to converse on stamps and postage and this led to letter-writing and the means of communication. The pupils were all eager to talk. Even the backward pupils who never raised their hands or answered questions were suddenly found to be taking part in the discussion.

The teacher came to me later in the day and told me about what had happened in the class. This gave me an idea and I discussed this subject in a small group



Students studying the Postal System

meeting with a number of other teachers teaching different subjects to class VI. As a result of our discussion we decided to take up the subject "Postal System" as a project for study in which not one but a number of teachers teaching English, Hindi, Mathematics, Social Studies and Art would collaborate to conduct the project.

The teachers began by first discussing the subject with their pupils. After that

each subject-teacher guided the project in her area of knowledge in the following way.

### Reading and Composition

The language teachers for English and Hindi asked the pupils to search for all information relating to the subject in English and Hindi books, journals, magazines and newspapers. Where the language was difficult and beyond the comprehension of the pupil, the teacher paraphrased and explained the idea of the passage. Thus the pupil collected information on railways, post offices, ships, postage stamps, postmen and postal workers. Some pupils went to consult books in the Delhi Public Library while the others bought picture albums and story books from the book stores. In the course of their research, each pupil was asked to keep a vocabulary list of new words and phrases learnt, such as 'man on duty' 'postal clerk' 'date of delivery' 'hours of clearance' 'delivery van' 'mobile post office' 'addressee' 'sealing' 'mail bag' 'airmail' 'postal rates' etc.

Before they were set on composition work, groups of pupils were taken to visit the Gole Post Office, the Delhi Railway Station and the Air Port and asked to observe the operations involved in carrying letters to other places. This was followed by discussion. After that the pupils were asked to write short paragraphs, letters and dialogues on what they had seen on their trips and narrate any other interesting experiences they may have had.

### History

During these classes students read stories of how kings, rulers and the common people communicated with each other in olden days. They searched into the encyclopaedias for pictures of carrier-pigeons and of dogs carrying letters. They read how letters were sent by people living near river banks—these people used to dig special places called 'patans' to catch bottles in which letters were placed



Students learning about the functioning of a post office at the Gole Post Office, New Delhi.

and then the bottles were made to drift with the current of water to the other side of the river. Letters were also sent through wandering bards and minstrels. Much later came postmen bringing letters on horses, bullock carts or bicycles. The pupils collected innumerable kinds of stamps. From a study of the stamps of the past and the present, they found out that in early times stamps carried pictures only of kings and rulers while now we can construct the whole history of a country (its industrial development, its national festivals, etc.) from its stamps. Old Indian stamps displayed Queen Victoria, King Edward and King George whereas after Independence we have had stamps of Mahatma Gandhi, of great poets and saints like Mira Bai, Tagore and Tulsidas, of the Railway centenary, the Asian games and the 2,500th Anniversary of Lord Buddha's birthday.

### Geography

The pupils had collected stamps of many countries. These countries were located on maps. The pupils studied the means of communication between India and these countries—they made special maps of the land, sea and air routes between India and the different countries.

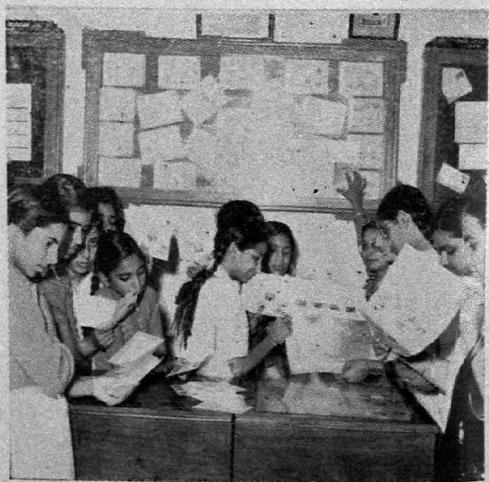
They could thus see at a glance the tremendous progress Man has made in his mode of travel over the past centuries.

### Arithmetic

The students held discussions centring round the denominations of stamps and coinage indicated on the stamps—both Indian and foreign. The students converted the values of various stamps and coins in terms of Indian money. They played games of buying and selling stamps, weighing letters and parcels and fixing rates of sending letters and parcels by land, sea or air to countries outside India. Thus they became familiar with different kinds of coins like pennies, shillings, cents, dimes, quarters, etc.

### Hand Work and Art

The children made models and charts of objects shown on the stamps or scenes of post offices, mobile postal vans, pigeon carriers, postmen of different countries, letters and envelopes of various kinds, ships and planes, trains and buses. All this involved the use of card board, clay, wood, paper, crayons, oils, water colours, and of little bits of cotton, wool, silk, khadder, silver paper and other material.



Studying the different kinds of stamps at the Philatelic Bureau, New Delhi

Besides these, they made picture albums depicting the work and activities of a postal department. Many children got interested in coin collection.

### Evaluation

At the end of four weeks, the teachers who had participated in the project and kept their own records of the pupils' work decided to make an evaluation by means of a questionnaire, followed by individual discussions with the Principal. The main points arising out of the evaluation were :

#### (a) *From the teachers' angle*

In the execution of the project the teachers had tried to guide the pupils along the lines of their own needs and demands. Their approach had been to guide and not to impose any idea or information on the pupils. The pupils collected information and the teachers helped them to arrange and classify the items in a logical manner. These items had often to be supplemented by explanation and more information so that no gaps were left in any area of activity. This attitude had created a happy, receptive atmosphere in which both teachers and children had come nearer to each other, and learnt to appreciate their respective viewpoints.

Since the teachers had to work with individual children in the course of the project, it gave them an understanding of each pupil's special abilities or weak points. This understanding was valuable to them in other class work because they could now reach every pupil.

#### (b) *The pupils' gains*

The project had been for the pupils a socially valuable experience. They had learnt to cooperate and work together in a group. This social contact gave them character-training which is of fundamental importance in education.

Secondly, the project gave pupils

training in responsibility. They had every freedom to work out their ideas in their own way. Whether pupils worked individually or in groups, they were given no set routine of exercises or homework. This gave them an opportunity to think and work independently and execute the project to the best of their group and individual ability.

Thirdly, the project carried the pupils beyond the bounds of prescribed textbooks into the wider areas of knowledge and experience. And because the method to acquire new information was so pleasant, the pupils were happy to learn.

Lastly, the project afforded every pupil the opportunity to come out and give something of himself to the total effort. Pupils who were timid, slow speaking, uncooperative or lacking in enthusiasm, brightened up and participated actively in the project because the discussions arising out of various situations were stimulating and interesting. They began gradually to shed their feelings of inferiority and shyness and gained more confidence in themselves. For students who were aggressive and inclined to do all the talking in the class this was an opportunity to take the lead and develop qualities of initiative. They were also given more responsibility in obtaining information and in leading group discussions and planning new procedures. Thus the energies and interests of all pupils were properly harnessed in a combined endeavour.

## II

### **Our School Clubs. By K.C. Vyas, Headmaster, New Era School, Bombay.**

MODERN educational psychology lays great stress on the development of the child's personality against the background of his individual traits of character, his aptitudes and abilities. If therefore we are to look at each child as an individual with varying capacities

and a distinct personality, we must provide for many types of facilities in a school programme that will give him sufficient scope to develop his potentialities to the fullest extent. In our school we have provided for such facilities by instituting a number of clubs catering to the individual needs and interests of children. These clubs are of two kinds—(a) Literary Clubs, with an academic bias and (b) Other Clubs revolving round the various extra-curricular activities of the school.

### Literary Clubs

Our school has three literary clubs—(i) Languages Club in Hindi, English and the regional language, (ii) Science and Nature Study Club and (iii) Art Club.

The aim of the Languages Club is to develop the students' power of expression in language. The members of this Club meet once a week outside school hours to discuss prominent authors and their works and select a few authors for study. Then they proceed to collect a number of books written by and on these authors with the object of conducting a project on the subject. Every member of the Club is expected to contribute to the project and when it is completed the group produces a magazine which is a detailed record of the students' work. Another important activity of this Club is to organise recitations and hold competitions and debates in which the members participate. Quite often this Club invites well known authors to give talks on the book written by the author himself. Thus our school children have invited many authors and poets like Chandravadan Mehta, Sneharashmi, Betai Sundaram, Karsandas Manek, Kavi Premanand, etc. These authors and poets vividly put before the children their experiences that inspired them to write. To make these programmes fruitful the group circulates at the beginning of the talk, cyclostyled manuscripts of the poem or recitation on which the authors will speak.

### The Science and Nature Study Club

emphasises practical and field work in the study of science. This club has two groups—the Science Group and the Nature Study Group. The Science Group gathers information about various modern inventions and other scientific topics and puts out this information in the form of a weekly newsletter. The Group organises debates on subjects of scientific interest. The members perform many experiments of general interest and the Club produces certain articles of daily use like tooth paste, soap, ink, vanishing cream, etc. The Club has encouraged many of its members to establish a small laboratory of their own in their homes. The Group organises excursions to places of scientific interest such as Thermal Power Station, Burmah Shell Refinery and National Laboratories in Poona. Before visiting these places, the Club finds out all the necessary theoretical information and working of these establishments. After visiting these places they hold a general discussion on their observations. With the help of the school and the members' voluntary contributions, the Science Group has built up a good library of its own on Science. Once a year the Group organises an exhibition of its work.

The other group attached to the Science Group is a Nature Study Group. The main activity of this Group is to conduct outings to the hills around Bombay. These outings are called Nature Rambles. On these rambles the members always take with them an expert, mostly a member of the Bombay Natural History Society, who can explain things to them. Usually on these outings the Group follows the following programme:

1. The study of the flora and fauna of Bombay.
2. The study of the water-bird colony, or red ant's nests, etc.
3. The study of insects as well as the study of the stages of various small creatures like frog etc.
4. The study of the birds of Bombay and migratory birds that come and go during the seasons.

On their return the Group submits a report to the general assembly and exhibits specimens collected by them.

The Club has a regular programme of visiting the Natural Sections in the Prince of Wales Museum and going to Victoria Gardens or seeing films on nature study. The Group often arranges lectures by specialists on subjects of general interest. At the end of the year the Group publishes a magazine of its work.

The third important literary club is the Art Club (Kala Sangam). This Club has a programme of stimulating and developing the artistic abilities of children. The programme of the Club includes appreciation of pictures of art and art decoration. In fact this Group is in charge of decorating the school with pictures and murals when there is some occasion to celebrate. Another activity of this Club is to organise excursions for landscape painting and free hand drawing. The members also meet well known artists staying in Bombay and see their work and discuss it with them. Last year this Group organised a tour to the Ajanta and Ellora Caves and on return they arranged an exhibition of the sketches they had made at the caves. The students also visited the Elephanta Caves and the Art Gallery in Bombay. During festival days the Club prepares greeting cards which are printed and sold. This Club helps in all the dramatic performances of the school by arranging the stage settings and improvising costumes and makeup. All the school magazines put out by different groups are helped by this Group in illustration work and magazine makeup. This Club has produced a child art number for the school magazine containing pictures done by children of three to 17. This magazine has been printed.

### Other Clubs

These clubs revolve round the extra curricular activities of the school. Thus

we have a Swimming Club, a Cycle Club and a Riding Club.

The Swimming Club meets every Saturday from 2 to 4 p.m. in the swimming bath and conducts teaching lessons for children who want to learn swimming. The whole organisation of this Club is in charge of its members. They collect fees, take attendance and maintain discipline during the practice hours. Students who are very good at swimming are in charge of instructing the beginners. The advanced students practise the art of life-saving. In this Club the students of Standard VIII play an important part because for them swimming is compulsory. If they do not pass in swimming they cannot be promoted to the next class. This Club has a membership of 250 regular members. Because of this Club we have been able to organise successfully annual swimming competitions in our school in which hundreds of children take part. This Club has its own library of books on the technique of swimming. Recently the Club has been practising a water-polo and is forming a water-polo team.

The Cycle Club teaches cycling and runs a department which teaches the repair of cycles. The members of the Club can disassemble a cycle and re-assemble it, they can mend a puncture and carry out other repairs. The Club organises long distance excursions on cycles lasting two to eight days. These excursions teach the students map-reading because the members of the Club break up in groups and follow different routes. Cycle learning is compulsory for students of Standard VII.

Through the Amateur Riders Club of Bombay we have been able to organise a Riding Club in our school consisting of 23 members. These members learn horse-riding in a scientific manner from the trained personnel of the Amateur Riders Club. During the annual sports of our school the Riding Club members give demonstration of their riding skill.

## III

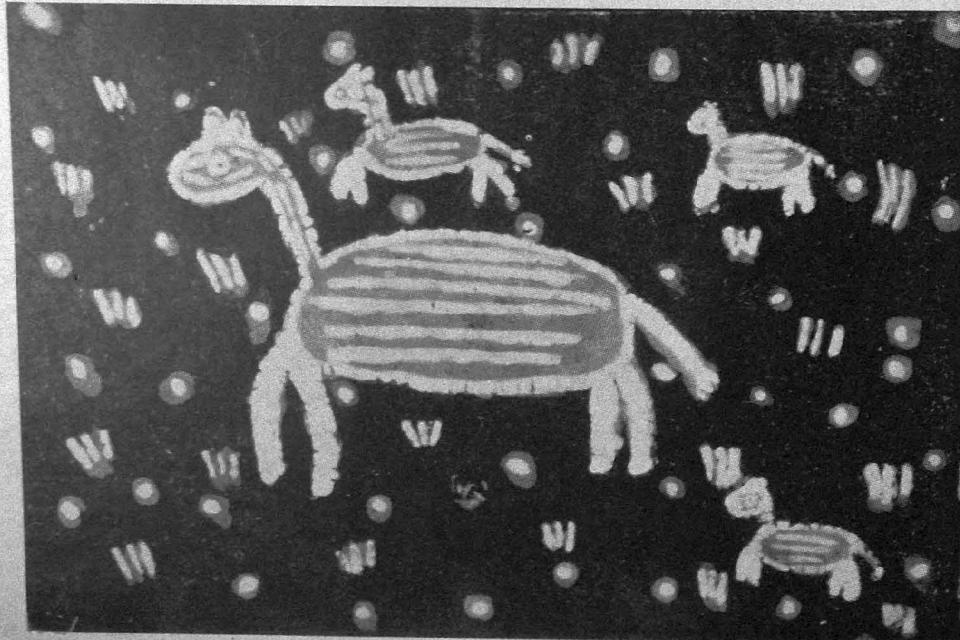
**Our Founder's day Exhibition:** By S.L. Ahluwalia of the Modern School, New Delhi.

OUR school is keenly alive to the utility and importance of the modern techniques and audio-visual aids in education. Recently the school had its annual Founder's Day exhibition where hundreds of charts and models laid out in about 23 halls and classrooms of the school were on display. The exhibition, lasting for a week, opened on February 27, 1958.

The preparation of exhibits and articles for the Founder's Day exhibition is a continuous process that goes on throughout the year with all possible integration and correlation with the curricular subjects and other school activities. The exhibits are prepared by boys and girls throughout the year as part of their assignments.

The exhibition was divided into 17 sections according to the subjects and various co-curricular school activities. A brief account of some of these Sections will give the reader an idea of the general pattern and plan of the exhibition.

First there was the *Guidance Section* which displayed (a) posters and charts prepared by students for use in the guidance and counselling services in the school and (b) a vast variety of psychometric tests used by the school Psychologist. The *Physics Section* consisted of (a) different types of working models of simple machines, prepared and assembled by the students, (b) a model depicting the dispersion of rays of light through a prism with the help of threads and a few mathematical puzzles devised by the students themselves. The *Chemistry Section* included an arrangement of elements, the fundamental bricks of the Universe in the form of wooden cubes



"Horses"—a four-colour Batik piece done by a student aged twelve

giving all the necessary information about the characteristics of different elements. This Section also showed the various processes involved in the manufacture of steel and glass with the help of charts, models and specimens displaying the various ingredients required.

Two interesting exhibits in the *History* Section were (1) a correlated project on the "1857 Revolution" comprising various pictorial and illustrative charts in developmental series and a printed booklet prepared by the History students and (2) "Elements of Nationalism" series of charts analysing the various contributory factors that led to the emergence of Indian nationalism. Of special interest in the *Geography* Section were (1) a three-dimensional atlas of India—a set of 12 models depicting various physical and economic details about India (2) a set of 20 models called the "Fantasy of Nature" illustrating the work of agents of erosion and land forms and (3) "Cinerama of Creation" which was a set of cinematic boxes showing the phases of Creation and Evolution of the earth.

The Art Section attracted considerable attention. This Section had on display a large variety of paintings, graphic art, pottery, batik and hand printed textiles, each piece an original expression of the young designer. The paintings were divided into different age groups, ranging from spontaneous, not-so-defined work of early childhood to the more certain and mature work of adolescents.

The younger children had also displayed their exhibits in the Kindergarten Section and the Junior School Section. The Girls' Club had a corner to itself which displayed inexpensive and utility



"Self-Portrait" by a girl of eleven

decorative articles prepared from scrap materials and some artistic table lamps, small dolls and tea-cosies.

# ENGLISH IN OUR SECONDARY SCHOOLS

**A**LMOST everywhere one hears people say that the standard of proficiency in English in our schools is going down. The boy who leaves school today has less command over the language and poorer grasp of its spelling and grammar than his compeer about a decade ago. He halts and stammers in speech and in writing he commits mistakes, which are preserved as howlers by a generation that boasts that in its prime it thought and dreamt in English! From all quarters comes the same cry of deterioration in the standard of achievement among our young boys and girls. Parents and guardians no less than teachers and examiners have the same tale of woe to tell.

The teachers, however, are more actively concerned than as mere spectators of this decline, for it is they, rightly or wrongly, who are held responsible for the growing lack of language 'sense'

among the students of today. The inadequate knowledge of the boy who passes the High school or Intermediate examination is ascribed to the ineffective, unsystematic and unplanned teaching of unqualified teachers who are not properly qualified for their job. Some of them are not trained, others lack in experience and there are still others who perhaps do not possess the requisite knowledge of the subject and make futile efforts to impart what they do not know themselves. But if this phenomenon were to stop just there, we might say that we have found the answer. "Eliminate the unqualified teacher and you have solved the problem." But I have come across many sincere and devoted teachers who show signs of acute frustration, resulting from the disparity and disproportion between the efforts they put in and the results they achieve.

These are teachers who know their job and do it well and with zest and devotion. Even so they find that there is such a tremendous gap between the energy they put in and the meagre return they get for it that a sense of frustration is almost inevitable.

## Who is to blame ?

What is the reason for this unfortunate state of affairs? If we look at the problem from a detached angle we will see that the reason is to be found in our scheme and mode of education. The reorganisation of Secondary Education, specially in the Uttar Pradesh, has indirectly and unintentionally placed heavier loads on young shoulders. The child who would have been admitted to class III before the new scheme came into force, now seeks admission to class VI, for classes III to V have been dropped from

the Junior High and Higher Secondary schools. Therefore, instead of spending a period of five years profitably at a primary school, securing a firm grounding in the different subjects, the child now goes to a Higher Secondary school after a brief and generally ill-planned tuition at home and starts taking his first lesson in English.

After this introduction to English he has only five years before him to take the High School examination. During this time he is required to master the niceties of the language that observes no uniformity of spelling and pronunciation. His predecessor who began his study of English in class III had full eight years to cover the same course, with more time and attention devoted both to him and to the subject. Also, more periods were

provided in the week's time-table for the teaching of English. Now the child is not only more tender in age than the child in the same class before the re-organised pattern of education, he is also required to do within five years, with less periods of work given to the subject every week, the same amount of work that was formerly done in eight years with more time given to it. Thus even in these five years the child has less hours of work for the subject than he had before in the same period. We assign now about six periods or even less per week to the teaching of English while formerly we gave it nine or so.

Consequently, the child is literally rushed from one stage to another. From the alphabet to the story, from simple patterns to more complicated structures, the transition is so rapid that there is hardly any time for a gradual and systematic consolidation of knowledge acquired. With the foundation thus left weak and unsure, with the language forms not properly grasped and assimilated the superstructure must necessarily remain shaky. The child has no chance, no time to develop a language sense.

So much for that. Now what about the curriculum? There are more subjects now in the curriculum, more branches of the same subject, calling for more time and energy than the child has or we can provide within the framework of our routine and time-table. And where the parents feel that he must do full and equal justice to all the subjects, the child usually groans under the heavy pressure of private coaching at home. English forms only a part and perhaps not a very significant part of a crowded time-table which the child has to go through.

### Briefly speaking

Together it all means that we have reduced the time, increased the course, laden the curriculum and divided the attention of the pupils among a multitudinous variety of subjects and activities.

Are we justified, then, in expecting the same standard of proficiency in English from our children as we did about twenty years ago? The dwindling importance of the subject too, and the clouds of controversy that have been gathering about it, have not left the teacher and the pupil unaffected. The days when the eye sparkled at the turn of a phrase or the ears felt soothed listening to some great piece of literature or poetry are getting rarer and rarer.

I would suggest therefore that for our good and that of our children, we be less demanding and more realistic in our expectations of them. The boy who goes in for his High School examination today after five years of hurried and half-hearted introduction to English cannot be expected to give a better performance than a boy of class VII or VIII of earlier days. It is enough if he is able to comprehend some simple forms and patterns of the language structure and render simple ideas into simple English. Given a small passage of English consisting of simple sentences with easy words, he should be able to give the meaning or the gist of the passage in his mother tongue. In other words, if he is able to understand a piece of simple English, and if he can also frame a few simple sentences to express some simple ideas, he has done precisely what is expected of him.

To conform to these modest objectives, we must modify the textbooks and set the standard of proficiency in the subject according to the attainments of the child under the new conditions. Easier material, easily intelligible pieces, must be prescribed for study for the High School or an equivalent examination. Textbooks in English should be changed and the courses reduced. The examinations must be designed to test what the candidate can be reasonably expected to have acquired under the changed system. This is the only way to save the teacher from frustration and the child from despair.

# *Around the States*

## **Andhra Pradesh**

*State Bureau*—The Government of Andhra Pradesh have established a Bureau of Educational and Vocational Guidance at Rajahmundry under the Second Five-Year Plan. The Bureau is under the administrative control of the Director of Public Instruction of the State.

The State Government have revived the Vocabulary Research Unit in order to complete the preparation of vocabulary for the writers of books for neo-literates.

### **Seminars**

Four District Seminars of seven days duration each for headmasters and headmistresses of Secondary schools in Telen-gana area were organised at Hyderabad, Warrangal and Karimnagar during December 1957—January 1958. The seminars made several recommendations for the re-organisation of Secondary Education.

Two subject-teacher Seminars for Secondary school teachers were also conducted in the State with the help of the All-India Council for Secondary Education. One held at Warrangal was for teachers of English. It was attended by 30 teachers. The other for Science teachers, attended by 32 teachers, was held at Guntur.

### **Bihar**

The following Short Training Courses and Seminars were held during the period under review :

- (i) Headmasters' Seminar at each

- (ii) Divisional Headquarters ; Secondary Education Seminar for Assistant Teachers at Divisional Headquarters ;
- (iii) Short Training Courses in General Methods for untrained graduates and undergraduate teachers ;
- (iv) Short Training Course in General Science at each Divisional Headquarters ; and
- (v) Refresher course in Arts and Crafts for one month at the Government School of Arts, Patna.

### **Delhi**

To provide the school teachers in Delhi with opportunities to keep abreast of the latest developments and techniques in the field of education and to discuss common problems and exchange ideas on academic matters under expert guidance, the Directorate of Education, Delhi, organized two seminars from 21st December 1957 to 1st January 1958, one for the teachers of Middle Schools and the other for the teachers of Junior Basic Schools. Each Seminar was attended by 40 to 50 teachers.

### *Seminar for the teachers of Middle Schools*

The following topics were discussed :

- (a) Objectives of teaching various subjects at the Middle stage ;
- (b) Learning experiences and activities useful for achieving the above objectives ;
- (c) Characteristics of good assignments and the problem of correcting written work ;

- (d) Evaluation of pupils' progress; and
- (e) Teacher-pupil relationship.

*Seminar for the teachers of Junior Basic Schools*

The following topics were discussed :

- (a) Improvement of Craft work in Basic Schools;
- (b) Role of a Basic School in the uplift of the village;
- (c) How to facilitate correlated teaching; and
- (d) Standard of academic achievements in Basic Schools.

Besides the above seminars, two seminars were organized by the teachers' organizations. The Delhi State Teachers' Association organized a seminar on the Teaching of Social Studies in the Middle schools. The Delhi State Post-Graduate Teachers' Club organized a seminar for teachers of Economics in the Higher Secondary Schools.

Besides teachers and heads of schools, experts in the various fields from the Central Institute of Education, Teachers Training Institute, Jamia Millia, and the National Institute for Basic Education, participated in the seminars. These seminars are expected to bring, through the teachers, a real improvement in the quality and tone of work in their respective schools.

*Expansion of Educational facilities*

To meet the rush of admissions in Secondary schools, the Directorate of Education has decided to open and upgrade 68 secondary schools during 1958-59. Ten Government High schools will be converted to Higher Secondary pattern from 1st April 1958.

It is proposed to extend the present one-year course for teachers' training in the Government Basic Teachers' Training Institute to two years' course from 1958-59 session.

*Revision of Pay-Scales of Teachers in Delhi—Delhi Administration has revised the scales of pay of teachers in drawing, languages and music in high*

and Higher Secondary schools in the Union Territory.

Drawing teachers who are matriculates and hold a diploma/certificate in Art and Drawing after having gone through a full-time course of 3 years' duration or part-time course of 5 years' duration will be entitled to the pay scale of Rs. 100-5-150-EB-8-190-10-250. Teachers in the subject in Higher Secondary schools holding similar qualifications will also enjoy the same pay scale, but those having, in addition, three years or more of teaching experience in a recognised school will be entitled to a pay scale of Rs. 120-8-200-EB-10-300.

Language teachers who have been in continuous service in Middle schools from 1st April 1950 or earlier and had passed Shastri or equivalent examination before that date on completion of 15 years of teaching service as Shastri will be entitled to the pay scale of Rs. 120-8-200-EB-10-300, if the status of the school is raised from Middle to High or Higher Secondary on or after 1st April 1950 and if the teachers concerned are appointed against vacancies in the High or Higher Secondary Department after such upgrading of the schools.

Music teachers holding a degree in Music from a University with a four years' course in Music or a five year diploma course in music recognised as equivalent to a degree will be entitled to a pay scale of Rs. 120-8-200-EB-10-300.

**Kerala**

*Reorganisation of Secondary Education*

The course of studies in Secondary schools has been reorganised on the basis of the recommendations of the Secondary Education Commission. Electives which have been introduced in standard X fall under seven groups. The groups are (i) Humanities (ii) Science (iii) Technical (iv) Commercial (v) Agriculture (vi) Fine Arts and (vii) Home Science. The Schools are being converted under a phased programme and it is expected that all High schools will be converted into

Higher Secondary schools during the period of the Third Five-Year Plan. Under the scheme of reorganisation, the duration of the school course is 12 years beginning from the age of six. These 12 years are spanned by two grades of academic schools—Primary (8 years) and Secondary (3 or 4 years depending on whether a school is High or Higher Secondary). The Primary classes are designated as standard I to VIII, the first five forming the Lower Primary and the next three forming the Upper Primary. When converted into basic type, the Lower Primary will become Junior Basic Schools and the Upper Primary, Senior Basic Schools. The Secondary classes will be of 4 years' duration in a Higher Secondary school. It is proposed to convert all the schools or at least a large majority of them into four years' High schools or Higher Secondary schools of which the highest class will be standard XII. There is also a proposal to compress the course into eleven years by reducing the Primary course to seven years.

The courses of study and syllabi have been revised for both grades.

### **Madhya Pradesh**

During 1957-58, three new agricultural Multipurpose Higher Secondary schools were opened in Maha Koshal region at Pedra, Halta and Sarangarh. Six of the existing High schools were converted into Multipurpose Higher Secondary schools, two in Madhya Bharat region and four in Bhopal region.

During 1957-58 eight High schools were converted into Higher Secondary schools in Madhya Bharat region. Seventeen new High schools were opened in Maha Koshal region, 3 Junior High Schools were upgraded to High schools in Vindhya Pradesh region. In the Madhya Bharat region two girls' Middle schools were upgraded to Girls' High schools, and five Boys' Primary schools were raised to Boys' Middle schools and eight Girls' Primary schools were raised to Girl's Middle schools. In the Bhopal region one Middle school was raised to the High school standard.

### **Madras**

#### *Reorganisation of Secondary Education*

The recommendations of the Secondary Education Commission and of the State Implementation Committee were presented in the form of a White Paper to both the Houses of State Legislature. The Legislature appointed a Committee to study the White Paper and to make recommendations. The recommendations of this Committee which were accepted *in toto* by the Legislature included the introduction of an Integrated Elementary course of seven years followed by a Higher Secondary course of four years. The Committee further suggested the appointment of Expert Committees to prepare syllabuses for the reorganised scheme of education. Accordingly, 40 Committees consisting of professors and lecturers of various Colleges, headmasters and teachers of Secondary schools and Elementary schools, were constituted to draft syllabuses for the various subjects of the curriculum. The syllabuses for the Elementary course have been finalised and published. The syllabuses for the Secondary and Higher Secondary schools will be published in due course.

### **Mysore**

A seminar-cum-training course in agriculture was held in December 1957 in Mysore under the auspices of the All-India Council for Secondary Education. The seminar was attended by 20 teachers from various departments of educational institutions including Agriculture, Horticulture, Veterinary and Animal Husbandry and Teachers' College, Mysore.

The Government High School for boys at Malleswaram has introduced crafts for manufacturing hollow cement bricks and chalk pieces. Besides providing the benefits of basic education, these crafts bring advantage to the school through the sale of chalk pieces to local schools and use of cement bricks for the improvement of school buildings.

A regional seminar of Headmasters and Educational Officers of Secondary schools was held at Maharaja's High School, Mysore, in January 1958. Attended by 50 headmasters and officers, the seminar discussed the Higher Secondary syllabuses, the use of audio-visual aids, dynamic methods of teaching and vocational and educational guidance.

### Orissa

**Refresher Courses**—Two refresher courses, one on Social Studies and the other on Oriya were conducted by the Board of Secondary Education, Orissa, with the help of the All-India Council for Secondary Education. The one in Social Studies was held from 7th October to 16th October 1957 in Radhanath Training College, Cuttack, in which 40 teachers of Secondary schools participated. The one on Oriya was held in the Basic Training College, Angul, from 23rd December 1957 to 2nd January 1958. Forty teachers concerned with the subject participated.

**Structural approach to the Teaching of English**—The Secondary Education Board, Orissa, will introduce the Structural syllabus for the teaching of English in the schools of the State beginning with the session 1958-59. In order that the teachers already in employment in the schools may get acquainted with the theory and technique of the 'Structural Approach', the English expert with the Board has been conducting short courses at different centres in the State. Five courses were held in November and December 1957 and English teachers from 130 Secondary schools have so far been trained. Several more courses have been scheduled for the coming months.

The High schools under the management of the District Boards of Koraput and Ganjam districts were taken over by the Government in the Education Department from 1st January 1958.

**Sports and N.C.C.**—In the District Headquarters of the State of Orissa competitions of sports and games were

conducted by the respective District High Schools Athletic Associations during the quarter. Selected candidates of different District Associations took part in the eighth Annual State High Schools Athletic Meet held at Cuttack on 16th, 17th and 18th January 1958.

The N.C.C. Day was celebrated on 1st December 1957 in the campus of the Orissa School of Engineering, Cuttack. The cadets organised an exhibition which was open to the public.

The annual training camps of the second Orissa Battalion and Independent Company and Junior Division Troop under their control were held at Jatni from 8th December 1957 to 16th January 1958. Thirty five officers and 1032 cadets from Junior Division and 9 officers and 322 cadets from Senior Division attended the camp. The 1st Orissa Battalion held their camp at Charbatia. Twelve officers and 381 cadets of the Senior Division and 33 officers and 1186 cadets of the Junior Division attended the camp.

### Punjab

#### Provincialisation of Local Body Schools

Under this scheme, 10,092 Local Body schools have been provincialised. Of these 321 are High schools, 762 Middle schools, 9,008 Primary schools and one Teachers' Training institution. Provincialisation of these institutions has meant entry of 28,000 teachers into government service at the usual government pay-scales. The main purpose of this provincialisation was to raise the standard of education and discipline in the former Local Body schools. The total expenditure involved in this scheme amounts to Rs 525.77 lakhs. The additional expenditure caused by the revision of scales of pay of Local Body teachers is to be shared by the Government of India.

#### Free Education

A scheme of free education upto the middle standard has been implemented in the Government schools of Kangra and Mohindergarh districts.

# SECONDARY EDUCATION IN THE SOVIET UNION

THE Soviet people take intense interest in problems of education. Not only are newspapers full of educational news of all kind, Moscow is the only town I have seen where daily newspapers are pasted on street corners and people read them on their way to work.

The modern map of the Soviet Union consists of 16 States. These are Socialist Republics uniting a population of 210 million people of different race, nationality, religion and language. The biggest is the Russian Soviet Federative Socialist Republic — RSFSR — a multi-national group where teaching in 42 languages is carried on in schools. The Ukrainian, Beylorussian and Georgian Republics, together with the Estonian, Lithuanian, Latvian and Karelo-Finnish Republics may be said to constitute the European

part of the Soviet Union. The Uzbek, Kazakh, Azerbaijan, Moldavian, Kirghiz, Tajik, Armenian and Turkmenian Republics are the Central Asian States which were occupied by Tzarist power and skilfully and carefully absorbed in the Soviet pattern after the Revolution. Children of each nationality in every Republic receive instruction through their mother tongue. Education through the mother tongue is considered the speediest method of removing illiteracy and teaching is done in 58 languages throughout the Soviet Union.

According to the census of 1897, the last before the Revolution, 24 per cent of the population over the age of nine were literate. The situation in the Central Asian Moslem Republics was even worse where women were completely deprived of their social and educational rights. Today conditions all over the Soviet

Union are materially different. Since the passing of the compulsory universal seven-year education law in 1930 the Soviet Union has become a country of universal literacy. The intensive programme of adult education and evening schools has helped to remove illiteracy and ignorance from the members of the older population group. Once people learn to read and write the large network of libraries keep up their interest. At present the country has a network of 392,000 libraries, one for every 500 members of the population. Besides this, 126,000 cultural centres and rural clubs help to improve the level of knowledge and maintain the interest of the population.

By

Kamala Ratnam\*

## The General Pattern

Children below the age of 7 are cared for in nurseries and kindergartens. After

its seventh birthday, every Soviet child has to attend school compulsorily in regulation uniform. Boys and girls study together and some schools have as many as three shifts per day. At present three types of schools exist, the elementary or four-year school, and the secondary seven-year and 10-year schools. Elementary schools are provided within every two kilometer radius and secondary schools within every three kilometer radius. For longer distances in rural areas transport is provided for children to attend the nearest schools. In remote and hilly areas like the "Far North, tundra, the mountain areas and steppe lands of Central Asia" boarding schools have been set up for children, providing complete State maintenance. During the first four years of school, children are taught by one teacher who teaches all subjects, later each subject is taught by a specialist. All teachers are trained in

\* Mrs. Kamala Ratnam has recently returned to India after a stay of nearly three years in Russia. This article is based on her personal observation of the Russian educational system.

special pedagogical institutes which turn out sixty to seventy thousand teachers per year. There are 213,000 general education schools in the Soviet Union of which 34,000 are secondary schools. These are housed in large centrally-heated spacious buildings with large windows admitting as much of sunlight during the long winter months as possible. There is a generous sprinkling of potted plants and flowering shrubs inside the classrooms. The number of pupils may not be more than 40 up to the 4th form, 38 in the 5th, 6th and 7th forms and 35 in the 8th, 9th and 10th forms.

According to the decision of the XXth Congress, the Soviet Union has decided to make ten-year secondary schooling compulsory for all children and since last year or so fees in the higher classes have also been abolished. It took nearly twenty years for the Soviet Union to fulfil the aim of universal seven-year education since it was first proclaimed as law in 1930. The present aim of universal ten-year education is expected to be achieved by 1960 after which the period of schooling may be enhanced by another two years. Children will start at the age of 6 and finish school at 18. The implementation of this programme will in actual effect mean improving the material condition of parents to be able to spare their children upto the age of 18. A rise in the educational standard of the people will also increase the material wealth of the country.

Corporal punishment is totally prohibited in Soviet schools. Other forms of punishment are rarer than demonstrations of encouragement, and never take the form of insulting the child's personality. Oral reprimand, bad marks for behaviour, sending out of class, expulsion from school for a limited or protracted period are the usual forms of punishment. For serious cases of bad behaviour amongst adolescents, there are special schools with an increased labour programme and even special labour colonies. There are special schools for retarded and handicapped children.

## Introducing Vocational Bias

Great attention is being paid to co-ordinate secondary education with the needs of life. The switch-over to universal ten-year education is fast changing the character of the higher forms in these schools. Education in these forms has to be a wise synthesis of academic and polytechnical subjects. At the moment teachers and educationists in the Soviet Union are discussing how to achieve the required amount of polytechnical education without sacrificing the minimum amount of general or humanistic knowledge which every child should have in order to fit him for life. Formerly secondary schools prepared students for university or other specialised higher institutes; now all the graduates of the secondary school cannot be accommodated in Institutes of Higher Learning\* and a large number of them therefore will have to go to work directly. Factories, industrial enterprises and kolkhozes will accept these graduates. In fact secondary school certificate will be the minimum qualification for any work. The modern secondary school in Soviet Union is faced with the task of preparing youth for activity and for this reason a minimum of polytechnical education is introduced in every school. At present there are 500 such schools in the RSFSR with a broad programme of teaching basic principles of production and the basic branches of modern industry. This linking of academic education with socially useful labour is demanding more and more funds.\*\* All schools in the Soviet Union are State schools. This ensures unity of programme and continuity of work and proper maintenance and distribution of educational institutions and also makes

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\*Admission to all institutes and colleges of higher learning is strictly regulated by the needs of the various industries according to the stipulations of each successive Five-Year Plan.

\*\*Educational and other social economic allocations in RSFSR are 61.3% of the whole budget, 57% in the Ukraine, 65.1% in Uzbek and 58.6% in Kirghiz.

every citizen independent of private charity. In essence the citizen is himself providing the material resources for his and his children's education through his productive labour for the State. This in my opinion is a very good tonic for his self-respect and dignity, for nothing can be so demoralising and degrading for the human soul as the outmoded system of private or public charity.

### **Introduction of Co-Education**

Soon after the Revolution, with the recognition of equal status and rights of women, education at all levels in the Soviet Union was made co-educational. This was done for economy, efficiency and above all to raise "the ideological standard of girls to the same level as boys".\* To make the women think in their minds that they were not in any way inferior to men, special girls' subjects like sewing, knitting, cooking and home science have not yet been introduced in the Soviet schools—although elementary sewing is taught to both boys and girls up to the 4th standard. The educational authorities are now of the view that perhaps the time is ripe for introducing special home science courses for girls. During the years 1942-1954, however, co-education was discontinued as an experiment but now it has been re-introduced in all schools. The number of girls in the schools is about 51% which reflects the correct proportion of women in the population.

### **Curriculum in the Higher Forms**

The following subjects are taught in the higher forms of the secondary schools: Russian language and literature, mathematics, physics, biology, zoology, chemistry, foreign languages, history and geography and physical culture. Great attention is paid to the programme of physical education and trade unions spend up to 20% of their income for this purpose. Painting and music are com-

pulsory up to the 6th grade only. After the return of Mr. Bulganin and Mr. Khrushchev from India, Hindi is taught to all children in Tashkent schools, beginning from the 4th class. The same experiment is now being tried in Moscow where seven year old children in one school are being taught Hindi. The task of expanding the teaching of Hindi to Soviet school children will depend upon the availability of Hindi teachers and textbooks.

### **Marking System**

There is the five figure system of marking : 5 (excellent), 4 (good), 3 (fair) 2 (poor) and 1 (bad). For the first three grades there are no examinations and pupils are promoted on the basis of their progress in class. There are regular examinations at the end of 4th, 7th and 10th grades. The 4th, 7th and 10th grades are limits within which certain subjects are completed and examinations are given in these subjects only. All pupils finishing the 10-year secondary school are awarded gold and silver medals. Pupils passing out with gold medals do not sit for entrance examinations of higher schools of learning.

### **Enlisting Parents' Cooperation**

Soviet schools maintain a close touch with the parents as well. The President of the RSFSR educational workers' trade union told me that trade unions continually work amongst parents to convince them of the necessity of educating their children and to cooperate with the school programme. This work is considered more important than merely imposing the fine of 25 roubles for not observing the law of compulsory education. In the more backward Central Asian Republics, this task was carried on with greater fervour because there the need of convincing the parents was greater.

Special mobile schools were organised for nomad areas. For this reason trade unions, industrial centres and kolkhozes

\*Girls' schools in Tzarist Russia taught lesser range of subjects than boys' schools.

are encouraged to build more and more schools.

All schools have parents' committees and they often hold meetings and discussions. The teacher also maintains contacts with the families by visiting the child at home. Most factories, industrial centres and special organisations have special schools attached to them and the parents help in building furniture and other equipment for the school and do odd jobs around like planting trees in the garden.

### Schools are Identified by Numbers

All schools in the Soviet Union are identified by numbers. School No. 28 in Stalingrad is built for the children of the workers of the tractor factory. It is a ten-year secondary school and was built and equipped by the tractor plant. It has well stocked science laboratories and works in two shifts. Last year 80 boys and girls graduated from the 10th class. The school has special evening classes for those factory workers whose education was interrupted by war. This school has 1055 children and 500 workers attending evening classes. There is a dining room serving hot meals. A doctor and a nurse are present on the premises all the time.

School No. 20 in Tashkent was built in 1935 for a workers' settlement. From small beginnings the school has now grown into a large modern school. It has 35 classrooms and an enrolment of 1200. There are 57 teachers of whom 35 have university education. This includes 30 women and 5 men who are Uzbeks. Kadirova, a 65-year old Uzbek woman, is a Merited teacher and has been in the profession for 45 years. The school has 18 out-of-school hobby groups and the plan of work is laid down and discussed by the Board of Teachers. Teachers receive increment every five years and a pension at the age of 50. There is no compulsory retirement. The teachers go on working as long as they feel able and only retire voluntarily.

School No. 717 in Moscow was built in 1953. The school building follows the standard architectural pattern for Moscow schools. There are 1300 children whose parents are workers, engineers and technicians who work in adjoining factories and live in five big buildings nearby. In the school 260 children are members of the young Communist League and 800 are members of the Pioneer Organisation which is a popular youth organisation for Soviet children and may be compared with the Scout movement in other countries. There is compulsory medical inspection of all the children twice a year. This school had special equipment for the teaching of driving, radio and television to senior classes. There were electric drills and lathes, miniature control board for the teaching of electricity control and an automatic telegraphic apparatus. In the automobile class the mechanism of "Pobeda" was being studied with the help of a real model which works with electricity—the main details are uncovered and easily visible. In the driving class, there was a real "Moskovitch" which works with gasoline and full traffic signals and lights. On the Board of Honour there were photographs of bright children. We were shown a class in foreign languages—all children in Soviet schools learn at least one foreign language. To my mind this was the only weak spot in this otherwise wonderful school. The teacher had probably never heard English spoken by English people and in our presence she was nervous and unreasonable with the children. The textbooks and the whole approach to the teaching of foreign languages, to my mind, was not satisfactory.

A complete contrast to this was our visit to the first class in this school, meeting the seven year olds on the 21st day of their schooling. The textbook used here combines Russian language and arithmetic and is beautifully got up with illustrations in colour. In the end, the Director introduced us to his most promising boys and girls.

Many schools celebrate special days

devoted to commemorate special occasions in the history of different countries. I attended several such functions organised to celebrate the independence of India and I was always struck by the enthusiasm and labour put into such functions. The children not only deliver speeches about India, they also recite poems and songs in Hindi and do dance numbers in proper dress.

### **Women Teachers**

A very large number of Soviet women are working. Nearly 80% of all teachers and 75% of all doctors are women. Besides a large number of them work as engineers and technicians. For this reason the State has tried to solve the problem of after-school child care. Many schools now have an extended day where groups of children whose parents return late from work are supervised by trained staff. They are provided meals and someone helps them with their home work. In order to meet this problem more effectively a network of boarding schools has been established since 1956 when 500 boarding schools were opened. Children in these schools will be admitted only at the parents' own wish and they will also bear part of the cost of boarding school, proportionate to their income.

### **Education in Rural Schools**

The content of general education in rural schools is the same as it is in towns. In addition, children in rural schools are taught the basic principles of agricultural production, breeding of cows and study of agricultural machinery. Every village in the Soviet Union does not yet have electricity and special power plants are provided in these villages for schools only. Rural school graduates have the same rights for entering higher institutes as town graduates. The task is to bring the villages up to the level of education and culture in towns. The teachers' trade unions are doing a great job for Soviet education. By looking after the comfort, security and rights of the teachers they are keeping this vast educational machin-

ery running smoothly. The trade unions provide clubs for the teachers, organise excursions and maintain rest sanitariums. They scrupulously watch the construction of new houses for teachers and control their quality. As soon as a new school is built in any village, another building is put up nearby to house the teachers. For the last six years it is obligatory for every kolkhoz to build houses for teachers. So far 40,000 such houses have been put up. Usually they consist of 2 to 4 flats. In small towns and villages, housing, heating and electricity are free for teachers. These amenities are provided to attract the teachers to villages. Every teacher in these areas is also entitled to receive one-fourth hectare of land free and he can do what he likes with it. The teachers are paid according to age, educational qualifications and length of service. In remote areas, far removed from cultural amenities, they are paid as much as 100% higher salaries. Secondary school teachers are required to work for 3 periods per day and are paid extra for correction work at home. On the whole a teacher is not worse off than his counterpart in the technical branches.

### **Religious Instruction**

Although there is no religious education in State schools,\* the moral and ethical basis of instruction is very strong. In fact "every lesson must include some element of moral instruction". The school as an instrument of Communist remodelling of society totally implements the principle of collectivism. The pupil is taught to combine his personal interest with the interests of the collective and subsequently with the whole of society. I did not find any selfishness or disregard of the rights of others in the common working man. Communism as such is not taught in schools, but the whole course of secondary education is based on materialistic principles of Marxism. History,

\*Those desirous of religious education can get it in schools under the jurisdiction of corresponding denominations.

## SECONDARY EDUCATION IN THE SOVIET UNION

geography and other sciences are taught in a materialistic way so as to make it quite clear that exploitation of man by man, and racialism and colonialism are wrong. These principles can be well expressed in the words of leading Soviet educator, A.S. Makarenko : "To educate a man is to furnish him with a perspective leading to

the morrow's joy". Of the success of the Soviet system of education, Makarenko said : "My kids.....have flown far away from me, rustling their wings, but these wings are no longer the tender sprouts of my pedagogical sympathy, they are the steel wings of Soviet aeroplanes"

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"It is the nature of man to believe and to love : if he has not the right objects for his belief and love, he will attach himself to wrong ones."

—Pascal

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# Window on the World

## News from Unesco and Abroad

### Germany

#### *The Students Academy, St Blasien.*

ONE of the many interesting forms of student self-government and student cooperative-government is the St. Blasien, planned and founded about three years ago by the students of the Humanistic Gymnasium : "College of St. Blasien". Its aim, as formulated by the students, is to make a critical study of the development of the cultural life of the people and to pursue this study through constant observation and interest. This aim has motivated every detail of the project. On the basis of individual interests, the students formed working groups—"Sections"—of which there are nine at present—four occupied with political problems, the remaining five with literature, art, history, drama and films.

The administration of the institution is conducted entirely by the students. The elected Director of the Academy is responsible solely to the school. The students solicit the advice and cooperation of their teachers. Each Section has its "Faculty Adviser" who gives counsel but can exert no influence on the management of the Academy.

The minutes of the sectional meetings reveal the painstaking preparation and discussion of the various working groups. The proceedings of the meetings are taken up at a general meeting of the student body and teacher counsellors, which meets every two or three weeks (while the sections usually meet every week). Usually a report on the above material is presented by a student which is thoroughly and frankly discussed and

analysed by the entire student body and counsellors, under the leadership of some student. This procedure serves one of the aims of the Academy, namely to provide training in effective public speaking.

The Political Section has been especially successful, not merely because of the interesting material dealt with but also because of the original methods employed by the group members. Most of the topics covered are debated and discussed at the group meetings. They deal with such topics as : German rearmament, the Saar problem, the death penalty, the German-Israeli accord, and many other domestic and foreign political problems. One of the most significant topics from the Academy's point of view was the topic "Germany and France talk it out", in which the standpoints of these two nations towards a United Europe were clarified and compared. The Political Section adopted the adroit manoeuvre of conducting a formal plenary session (modelled on federal legislative procedure) in presenting controversial questions.

In addition to dealing with the various problems themselves, the students invite eminent political personalities and industrialists, both native and foreign, in order to discuss the problems with these experts in their respective fields.

The Literary Section has covered a list of notable poets and authors. There are poetry readings and discussions on books. An important event for this Section and the Academy as a whole was the visit of Reinhold Schneider who gave some readings from his as yet unpublished works. The other Sections

also invite professionals in their respective fields—musicians, actors, professors, etc. The Drama Section composed a drama and submitted it to the group membership for criticism.

All these activities serve to enrich not only the individual groups, but also the Academy as a whole, and to exemplify the goal of the Academy in its deeper meaning. In this institution these young people themselves found a means for voluntary self-development, for a comprehension of many problems and for creative recreational activities.

(Foreign Education Digest)

### Hungary

#### *A "Reading Machine" for the Blind*

A Hungarian scientist, Mr. Laszlo Zelenka, from the Institute of Physics attached to the Technical University in Budapest, has invented a "reading machine" by which blind people may read typewritten or printed texts.

The machine consists of an instrument similar to a fountain pen containing a "seeing-eye" which is used to follow the lines of text, and which is attached to a box on top of which is a small, perforated square, the size of a postage stamp. As he moves the "seeing-eye" along the text, the blind reader feels, with his other hand, the outline of the letter or sign on the perforated square.

The machine operates by a process similar to that of television. As the "seeing-eye" moves over the letters, it transmits electrically the light and dark outlines to the apparatus in the box. This then sets in motion needles which re-create the form of the letter or number through the perforated square.

(Unesco)

### Indonesia

#### *Bamboo Sprouts into Science Teaching Apparatus*

THE versatile bamboo tree which has been traditionally used in Indonesia to make anything from water containers

to musical instruments now has a new career ahead of it in nearly a dozen Indonesian science teaching centres.

Bamboo is only one of the ready-at-hand materials which are now being used in Indonesia to construct low-cost laboratory apparatus. With the help of some ingenuity and the assorted hammers, nails and other tools now being supplied to schools on a "100-rupiah" list of equipment, bamboo sections can be converted into force pumps or life pumps.

This is all part of a new trend in Indonesian science teaching recently reported by Dr. H. H. Grantham, a Canadian educator who has just completed a technical assistance mission to Indonesia for the Unesco.

In the words of Dr. Grantham, the trend consists of science teaching methods which stress "learning by doing instead of sitting and listening." To carry this out, Indonesian educators have opened a Science Teaching Centre at Bandung with apparatus supplied by the United Kingdom under the Colombo Plan.

Equally important is the mushrooming of the Bandung Centre into ten provincial centres scattered throughout the archipelago. In the near future, these centres offering on-the-job training to science teachers will be opened on the islands of Java, Sumatra, Bali, Ambon and Sulawese (Celebes).

Forty courses for teachers have already been conducted at the Bandung Centre. Nearly 900 teacher trainees and supervisors have gone through these courses.

(Unesco)

### Italy

#### *The Teachers' Contribution to International Understanding*

A two-week meeting, attended by young teachers from 18 countries, was organised recently by the Unesco Institute

for Education in Hamburg, the Italian National Commission for Unesco and the Italian adult education organisation Umanitaria. The subject was the teachers' contribution to international understanding.

Each participant had brought history, geography and foreign language textbooks from his school. While there was unanimous agreement that textbooks should be revised in a spirit of international understanding, participants felt that the real task lay with the teacher. It was his personal attitude towards other countries which influenced his pupils more than the objective facts he might impart.

The seminar set itself the task of preparing a draft handbook of practical hints for teachers. Small groups of three or four participants undertook various chapters: the general school atmosphere and its effect on education for international understanding, the origin of prejudices and their prevention, the formation of critical minds, the contribution of subjects such as foreign languages, geography, history, etc. to better understanding of other nations, and extra-curricular activities - exchange visits, pen-pal clubs and international camps. These topics provided a good basis for discussion on specific points, and produced many useful ideas.

At the closing session, participants approved the suggestion of a young woman teacher that the same group should meet again in five years' time and compare achievements, in the meantime keeping in touch with each other and reporting on developments.

(Unesco)

## Turkey

### *Students' Theatre Festival in Istanbul*

ISTANBUL was a host-city recently to student theatre groups from Belgium, France, Germany, Italy and Yugoslavia, which participated along with eight

companies of Turkish student players in an International University Theatre Festival.

The Festival was organised by the National Students' Federation of Turkey in cooperation with representatives of Turkish University Theatre. Besides two daily performances at the Saray Theatre the programme included formal discussions, and a newspaper "Stage Door" was published every day during the Festival.

(Unesco)

## United Kingdom

### *The National Apprenticeship Scheme*

BELIEVING that office staff need systematic training as much as manual workers and technologists, the Association of British Chambers of Commerce launched their national apprenticeship scheme for Commerce on May 27, 1957. The emphasis of the scheme is on the need for training in the skills of management, market research, sales, handling electronic computers, and even everyday office routine.

The scheme provides five years of training and education for those who leave school at 16, or three to four years for those leaving at 18. It will be conducted by the 100 chambers of commerce affiliated to the Association in collaboration with youth employment offices and technical and commercial colleges. The employers will provide apprenticeship training in such subjects as office organisation, accounting, purchasing, sales, distribution, production control and personnel administration. Candidates must hold the G.C.E. at "O" level in English and two other prescribed subjects, and their employer is to train them in office organisation and two other commercial activities.

The apprentices will attend technical or commercial colleges on a part-time basis and study for the national and higher national certificates in commerce.

Upon successful completion of their training, the apprentices who obtain the higher certificate or equivalent qualifications will be awarded a diploma by the Association. All apprentices will join through their employers and will be enrolled by an affiliated chamber of commerce.

The scheme is expected to raise the standards of commercial training and provide a pool of well-trained commercial manpower from which candidates for management can be drawn. A special feature of the scheme is the opportunity it provides for girls.

The scheme will be introduced gradually. A pilot survey showed that employers were greatly interested in the textile, chemical, shipping, engineering, and warehousing industries. It was hoped to attract boys and girls from grammar schools and the top forms of secondary modern schools. Small firms might provide training on a group basis. In isolated localities studying for the examinations might be carried on through correspondence courses. The scheme has been approved by the Clerical and Administrative Workers' Union.

It is planned to pay the apprentices during their training period the wages ordinarily received by the "white collar" workers in the industry concerned, or possibly even a higher salary.

(Foreign Education Digest)

## U.S.A.

### *California's Schools Organise Novel Road Safety Campaign*

THE youngster who steps blindly off the pavement in the path of fastmoving automobile is tragically familiar to most of the world's cities. The school's task in teaching traffic rules has been recognised in a number of countries and road safety classes run in cooperation with police authorities are now a feature of the curriculum in many schools.

A highly successful experiment in making the school children themselves responsible for their own safety in the streets was described recently by Mr. Harold Spears, Superintendent of Schools in California, United States, during a recent meeting of the International Advisory Committee on School Curriculum held at Unesco House, Paris.

According to Mr. Harold Spears, School Safety Patrols have been set up for elementary and junior high schools all over California, through the joint efforts of the Board of Education and the Board of Police Commissioners.

In San Francisco student safety patrols are maintained as a school activity. Boys and girls from the highest grades in elementary and junior high schools are chosen to serve on the patrols. Wearing a bright yellow uniform, cap and belt, patrol members guard street crossings at various points around the school. Their job is not to direct the traffic, but to hold up their schoolfellows until there is a break in the flow of traffic and it is safe to cross.

Members of each school patrol receive training from police officers. School children are taught rules for road safety in class, including the safety way from their home to the school. The patrol boys and girls see to it that these rules are applied at school crossings every day. Where a crossing is controlled by a police officer, the patrol member directs classmates according to the signals of the policeman.

This comradeship with the police officer and the acceptance of duty for the benefit of others at an early age are the foundations of good citizenship, and an important part of the educational process.

(Unesco)

## U.S.S.R.

### *Moscow School children form "English Club"*

TWENTY Russian students who, nearly two years ago, started an English language circle in a Moscow Secondary

school, have been responsible for founding an "English Club" with contacts all over the Soviet Union and in other countries. The students decided to form a musical group, complete with small orchestra, to sing English and American songs, and to organise "English evenings"

Helped by teachers at the school, the group started subscribing to an English newspaper which in turn led to the formation of a translators' circle. The Club's activities expanded rapidly. A concert was prepared which was presented at other schools, and eventually, over the radio. Letters received from all parts of the U.S.S.R. resulted in the creation of a correspondence section which encouraged exchange of letters with school children abroad.

Since then the Club has started its own magazine entitled "Our English Club" with news of its various activities, and has set up a radio-information Bureau which has organised a competition for the best English speakers. Albums are kept of letters received, of photographs of the Club's activities, and of postcards of English towns. (Unesco)

with in literature courses ; tolerance, community service, social responsibility, religious ideas, vocation, etc. The film is previously discussed at the club, and it is then briefly shown by a club member at the beginning of the meeting.

(Foreign Education Digest)

#### *International Cinema Institute, Rome*

**A**N International Cinema Institute for Young People was recently organised in Rome for the following purposes : To convene conferences which will study and determine the tastes and preferences of the young people ; to organise polls or adopt other methods designed to indicate the reaction of young people to films ; to form national and international agreements in support of the production of children's films ; to establish a children's film centre, together with an office of information and documentation.

(Foreign Education Digest)

#### *Unesco Youth Institute*

**T**HE 1957-58 draft curriculum of the Unesco Youth Institute, near Munich, includes four courses : (a) a course of the problems of leisure, to be organised jointly with the Institute for Education (Hamburg) and the Institute for Social Science (Cologne) ; (b) a course on physical education to serve as a possible preparatory basis for the international conference which Unesco plans to hold in 1958 ; (c) a course designed to promote the understanding of Asiatic countries by Western youth ; (d) a collection of studies on music and song as educational techniques in the youth movements.

(Foreign Education Digest)



# book reviews



**Educating our Rulers** by A.D.C.  
Peterson Gerald Duckworth & Co. Ltd.,  
London ; pp. 95 ; Price 7s. 6d.

THIS little book is based on the Estlin Carpenter Lectures, delivered by the author at Oxford in the spring of 1957. There are three chapters entitled, 'The Content of Education', 'The Structure and Ethos of the School', and 'The Provision of Teachers' and a brief postscript. The original title of the lectures was "Educating our Masters" but as that title was liable to be misunderstood as having reference only to the training of teachers, it was changed to "Educating Our Rulers". The author assumes that the world of tomorrow—the world in which the schoolboys of today will reach their manhood—"will be a world in which real industrial power lies in the hands of a class not of owners, nor of politicians, but of managers and technologists." It will be a world in which revolutionary changes will have taken place and the technical superiority of Western Europe and America over Asia and Africa will be rapidly passing away. "The leaders in this strange new world will be drawn, by and large, from the ablest boys in our secondary schools today." The question to be answered is, therefore, how are we to educate these rulers or masters of tomorrow?

The book is concerned mainly with the problems of adjustment in the educational system of England. But these problems have a wider significance and

the proposals made by Mr. Peterson are worthy of consideration by educationists everywhere.

The author pleads for a careful examination of the method and content of teaching in the context of the rapidly changing world of today. He raises questions about the proportion of scientists and technologists as against Arts men in the "Sixth form" and the Universities. He examines problems relating to early specialisation and the rigid separation of Arts subjects from Science subjects. He notes the influence of university entrance requirements on the curriculum of the school. The solution he finds for meeting the demands for larger numbers of school and university graduates who can meet the technical and technological needs of a modern nation, but at the same time securing a sound general education is to discard the distinction now made between Arts and Science. In the author's own words: "It seems possible..... that much more time could be found for general education at school by pruning the existing syllabus, particularly if we could break down the rigid division between Science and Arts." "If some additional time can be found by revising the syllabuses, would we not be giving the future engineer, politician, bishop or editor a more balanced education if he did some specialised work at school in both disciplines?"

The author suggests the creation of a new school at the University that might

be called "Science Greats" on the analogy of P.P.E. or Modern Greats at Oxford.

In the second chapter the author examines some of the problems relating to "streaming" of students in school and the advantages and disadvantages of a 'comprehensive' school "where transfer from one stream to another can be undertaken comparatively easily." He then deals with the 'ethos' of the English School. The essence of the English school tradition is the belief that "the purpose of a school is to train the whole personality of the boy or girl, and that for this purpose the natural instincts and tastes of adolescents, which are different in expression but not in essence from those of adults, should be used, rather than ignored or repressed." The three characteristic British devices for the training of moral character are organised games, the prefectorial system, and "the monastic, isolated, single-sex boarding school." Mr. Peterson on the whole approves of these devices but pleads for a progressive view of them in relation to the changing social pattern. He goes further and argues for the need to break down the barriers of national insularity by providing for exchange of students between England and foreign countries.

The third chapter deals with the problems of finding all the teachers necessary for schools and particularly science teachers. Mr. Peterson's solution (apart from improvement of conditions of service of teachers) is the breaking down of the isolation between Arts and Science, so that a teacher could teach both Arts and Science subjects. He also suggests that more liberal arrangements for sabbatical leave, for travel, and even for brief periods of change of occupation might help in encouraging more young people with promise and ability to enter the teaching profession.

This is a stimulating little book and not only teachers and educational administrators but all thoughtful persons concerned

with the well being of their nation will find it well worth reading.

S. Mathai

**The Child of Eleven** by D.V. Skeet, University of London Press Ltd., Warwick Square, London E.C. 4; pages 176; Price 10s. 6d.

THE examination taken by a child in Great Britain at the age of eleven or so is a very important event in his life. It is perhaps the single most important determinant of his future educational and occupational status. No wonder the parents in that country attach such great importance to this test. In recent years, however, the examination has come in for severe criticism chiefly on the ground of attempting to predict at too early an age the educational and vocational future of the child. *The Child of Eleven* by Skeet is an attempt to study the main strengths and weaknesses of this examination from the viewpoint of the average parent.

In the main there are two important questions with which the author concerns himself. One is whether the eleven plus examination as conducted at present possesses a sufficiently high degree of reliability and validity to serve as a basis for the allocation of children to different types of secondary education. The other is the more fundamental issue: why select at all? The first seven chapters are addressed to an examination of the former and the last to that of the latter. He begins with a brief historical introduction to the facts of the present secondary situation, describes the important drawbacks, particularly the subjectivity of the essay type examination and explains why the older type of test has come to be replaced by objective tests of intelligence, Arithmetic and English. He discusses in a lucid manner the general principles underlying the construction and standardisation of objective tests and while frankly admitt-

ing that they are not free from defects such as amenability to practice and coaching, subjectivity in marking, etc., they make a distinct improvement over the traditional examination. The author dwells at length on the care that is now being taken to improve the new instruments and the ingenuity exercised to circumvent possible pitfalls. While it would be wrong to claim perfection for the new tests, it should not be difficult to rebut the charge of unfairness. To quote the author : "Mistakes are bound to be made in dealing with human, undeveloped material. Any system must be based on what the child is now and can do now, without any guarantee for the future, but, all in all, the current procedure stands up well to its critics. Within the present framework of secondary education, an efficient method of allocation has been devised, is being faithfully applied, and painstakingly improved. Those who deny this must answer the question: What procedure would you substitute? If they know of a better, there are 146 Education Authorities who will welcome it joyfully."

With regard to the other question, namely, why select at all? Skeet gives a simple answer and in his own words it is this. "If the country is to have a good return for what it spends on education, its best brains must be set to work from a reasonably early age on studies that the intellectually gifted can manage; the subjects studied will include the more intellectual aspects of our technological needs (e.g. mathematics, or statistics, or engineering calculations), or the kind of reasoning and appreciation involved in human studies, or the difficult task of acquiring a fair mastery of one or more foreign languages. These things are not for the average child, whatever social philosophy is envisaged, simply because only the more-than-average child can meet them without being bewildered or discouraged."

A book written as lucidly as the present one and concerned with a question of such great importance as that

of the selection of children at eleven plus should interest teachers and parents alike. Of particular interest will be the rather unorthodox discussions of the core curriculum, the cumulative record card, the reliability of teacher ratings and of the principle of multilateralism. One may or may not agree with the views expressed, but there is little doubt that these will help clarify one's ideas on these subjects.

Veda Prakasha

**The Teaching of Mathematics—**  
Incorporated Association of Assistant Masters in Secondary Schools—Cambridge University Press ; pp. 231 ; 15s.

THE report is the seventh book of a series which deals with the teaching of principal subjects in the secondary school curriculum. In keeping with the high standard of other six books which the Association has brought out during the last few years, the present book is a welcome and valuable publication. It is the result of a thorough examination of the whole content of school Mathematics in the light of the changes brought in by the 1944 Act and the development of a variety of secondary schools. It incorporates in it the wide knowledge and vast experience of a large number of teachers and other workers in the field.

The book has dealt with both the theory and practice of teaching Mathematics. It has made some very laudable suggestions on how to create among the pupils a love for the subject. We know only too well how much this subject is dreaded by pupils—at least a majority of them. In line with the psychological thought on the question of Transfer of Training, the book correctly says that "there is less evidence than we suppose to show that these qualities can be transferred from work in Mathematics to other fields of activity. There are clear implications here for the teacher of Mathematics. The intelligent response to this challenge from the experimental

psychologists is a resolve to modify the material and the treatment of the mathematical curriculum so that the maximum transfer will occur. This would imply a closer association of mathematics with everyday life, and a wider field of exercises in which reasoning can apply." The book then goes on to discuss the basic principles and proper methods of selecting syllabus and teaching some important concepts in pre-secondary and secondary school Mathematics. It lays stress on the fact that the solving of problems, as opposed to a piece of calculation, should form a major part of working of the Mathematics class. "Problems require the translation of language into symbolism, the selection of operations and the choice of logical as against illogical procedures, and so are of supreme value in genuine mathematical education."

Another topic on which the report has made some good suggestions is that of correction, which has unfortunately reduced life to a regular drudgery for teachers. Much of it can be done by the pupils themselves and the amount of labour and drudgery which the teachers will thus be saved will indeed be a refreshing change for them.

The book has given some very practical hints on ineffective teaching of some general topics and the teachers will do well to read them and apply them in their classroom practices. Of special mention in this connection is what the book has termed 'the environmental approach' which is an extension of the principle of a purposeful beginning to cover the whole range of academic work.

The teachers of Mathematics will greatly benefit by a reading of the book. It will be useful for the teachers-in-training also and the training colleges can with advantage include it in their list of books suggested for the pupil-teachers who offer Teaching of Mathematics as one of their subjects.

R.N. Mehrotra

**Captain Kidd's Cat**—By Robert Lawson ; Publishers : Frederick Muller Ltd., London ; Price : 12s. 6d. net.

**T**HREE have been many famous pirates, Jean Lafitte, Blackbeard, Bonnet, Captain Tew, Culliford and the most famous or rather infamous of them all was Captain William Kidd. When one hears a mention of Captain Kidd, one immediately conjures up visions of bloody pirates, cutlasses and corsairs, buried treasure and buccaneers, ships and swash-bucklers. The pirate's life sounds pretty exciting. Sailing the seven seas, capturing galleons full of gems and bars of silver, even beautiful ladies. Robert Lawson, however, has a different tale to tell of the legendary exploits of Captain Kidd.

This book purports to set out the true and doleful chronicle of William Kidd, as narrated by his faithful cat, Mc Dermott, which explodes the Kidd myth and reverses history. Mc Dermott was quite a cat and a good judge of character and was Captain Kidd's constant and beloved companion on the "Adventure Galley" from the beginning when the plot for sending Captain Kidd on the ill-fated privateering mission was hatched by Lord Bellomont and his "noble" friends, till the moment Kidd was hanged and buried after his long incarceration in Newgate prison. Who then is better qualified to tell of the vicissitudes attending Kidd's unfortunate cruise and his unjust trial and execution than Mc Dermott, his faithful cat ?

The cat's-view of Captain Kidd is narrated by Robert Lawson in a delightful style with a fund of humour and veracity of detail which make this book most reasonable and at the same time bestow on it an air of authenticity. One's sympathy immediately goes out to the gentle merchant Kidd when his imperious and domineering wife bawls at him, "Will-YUM," "WILL-yum," which, according to Mc Dermott, sounds like "a topsail ripping in a monsoon." This feeling is further heightened when Kidd replies, "Yes, my dear," leaping up like

he'd sat on a tarantula.

The manner in which Captain Kidd is bull-dozened into accepting a privateer's commission by self-seeking "noble friends" and an over-ambitious wife is graphically told. When Kidd protests in the face of overwhelming pressure, Mc Dermott likens him to "a mouse, squeaking in a thunderstorm."

But Captain Kidd is a mighty captain, once in command of the ship. He whips into shape a mutinous crew and executes a long, tedious and luckless voyage in the face of tremendous odds, with consummate skill. His difficulties arise from his honest adherence to the letter of a hapless commission in which he has no heart. And when he finds politics mixed up in his mission, poor Captain Kidd cannot help bursting out to say : "a black curse on the day I was so weak-minded as to assume this unlucky command."

His crew force him into piracy and his gunner is killed accidentally at being hit with a swill-bucket by Captain Kidd. And to top it all, Lord Bellomont, Governor of New York, wheedled him into coming ashore at Boston by the promise of a pardon which promise was given only to be broken the moment Captain Kidd landed. And yet at his trial Kidd steadfastly refused to give evidence against the several English lords who were implicated as share-holders in his privateering venture.

After reading Mc Dermott's chronicle, one's feelings towards this famous character, whose name and deeds have been interwoven into popular romance, are summarised by the toast—"To our friend, Will Kidd, Merchant, Captain and Gentleman. He trusted too many too far."

A.D. Hiranandani

**Career Pamphlets** — (Vocational Guidance Series) by J. S. Gulati; Published by Y.M.C.A. Publishing House, Calcutta—16.

No : of Pages Price

(i) Careers for Medical Graduates, 1956	25	.25 n.p
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(ii) Careers in Agriculture, 1957	52	.50
(iii) Careers in Engineering, 1957	134	1.00
(iv) Careers in Accountancy, 1956	19	.25
(v) Careers in the Building Industry, 1956	32	.25
(vi) Careers for University Graduates, 1957	31	.25
(vii) Careers for Women, 1956	27	.25
(viii) Careers in Government Services 1956	33	.25

It is a matter of common knowledge and experience that the majority of our students when they leave school, college, or University have practically no idea of the type of work available for them in the outside world, to say nothing of the work which would suit them best according to their capacities, achievements, interests, personality qualities and life circumstances.

This lack of knowledge on the part of our students during the past has continually led to unhappy results. From the view point of the country's social economy it has often resulted in deplorable wastage and misuse of human energy, as has been shown in such various forms as delayed employment, under-employment, labour turnover, productive inefficiency among workers and the like. From the point of view of the individual himself it has been one of the main causes of vocational maladjustment and consequently of personal unhappiness.

To remedy a situation of this kind, a planned and adequate programme of vocational guidance is necessary. So far teachers and parents have in their own way provided some sort of Guidance in this direction but even such limited efforts have been handicapped by the non-availability of occupational information in suitable form. They will therefore be gratified to know that during the last few years some useful work has been

done in this direction by some individuals as a private enterprise and also by Government and other agencies, with the result that quite a useful amount of career information has since been accumulated in the shape of career pamphlets which can easily be used by pupils, teachers and parents alike.

The present series under review published by the Y.M.C.A. has been prepared by Mr. J. S. Gulati who has by now acquired a good deal of experience in the collection and organization of occupational information for school leavers. Both he and the organisation for which he has written these pamphlets have to be congratulated for bringing out this useful series.

For purposes of review I have divided the eight pamphlets into two categories. The first five under category I, deal each with a particular field of work, say, engineering, agriculture, medicine, and so on. The last three, put under category II, are more general in character and have been written from the standpoint of certain classes of job-seekers rather than from the point of view of vocations as such. The first of these three pamphlets deals with a variety of occupations open for the raw university graduates, the other deals with those available for womenfolk in general and the third concerns itself with Government services and is intended to help those who want to enter Government jobs.

The pamphlets under the two categories follow two different patterns of presentation, as might very well be expected. One common feature of all the pamphlets is the general introduction 'Read This First' which is meant to be a sort of lesson for the job-seeker to remember. Here the writer has sought to emphasise the idea that all work is God's work and that we do it under His Orders, and according to His laws, and for His purposes and hence the determining factor in the choice of a vocation is His will. Without reflecting on the

religious background of this ideal, I should however point out its psychological implications for the child in so far as it may have a dampening effect on his initiative, self-reliance and his capacity for self-direction.

Coming to the main body of the pamphlets, the introductory part in each belonging to the first category deals with the importance of the work in the national economy and the attention it is receiving in the Five-Year Plans. The introduction is followed by a brief but adequate description of such important points as qualifications for entry, training requirements, cost of training, types of awards, jobs available after training, method of entry into each of the different types of jobs, earnings, and the future outlook. Where different types of jobs are available under any one particular profession all receive separate attention of the author. Thus, in the pamphlet 'Careers in Engineering' all the various branches of engineering, e.g., mechanical, civil, electrical, chemical, metallurgical, mining, etc. have been discussed.

The appendices which again are a common feature of all the pamphlets have to be regarded as the most useful part of these pamphlets. They give upto-date classified information about the recognised training institutes, the diploma, certificate or degree they award and the services for which they are recognised. A State-wise account of the training institutes with the type of training they offer besides other necessary information about them is also given. Information about competitive examinations in each different field of work is also contained in these appendices. This information consists of such items as the names of competitive examinations, age-limit for entry, examination fee, subjects of examination, centres of examination, probationary period in service and scale of pay.

Mr. Gulati has done a really creditable job in compressing so much useful material in such small, handy pamphlets.

The information contained in these pamphlets is to the point and has been presented in a well-organised and methodical fashion. It is accurate, up-to-date and relatively free from bias. The language is simple and non-technical and can be easily understood by people who have acquired a working knowledge of English. I'd however suggest that a much larger number of our parents and pupils would benefit by the information contained in these pamphlets if they are also translated in regional languages. The value of these pamphlets would be further enhanced if an abbreviated list of other sources of information for each field of occupation is also appended. This feature is especially important in pamphlets like these where the information supplied is bound to be concise. Judging, however, from what they give rather than from what they do not, these pamphlets are more than worth the price one has to pay for them. I commend them to all school libraries and urge parents, teachers and students to make full use of them.

Baqer Mehdi

**Duniya Ki Sair Assi din main** :—in Hindi by Dr. Parmeshwaridin Shukla ; Published by Sasta Sahitya Mandal ; Price Rs. 1.25.

AS is evident from the title, the book deals with a tour of the world in eighty days. In his introduction the author says that the book is intended for

children up to the age of fifteen. But on reading it one feels that even adults who have not been to all the places described in the book can learn much from it.

The book is a collection of letters written by the author to his children during an official tour he undertook some time ago in which he covered a great many countries of the world. During this tour the author had an opportunity to travel into the interior of these countries to see many villages. In his letters he has given an eye-witness account of the villages of countries like Indonesia, the Philippines, Japan, the Hawain islands, U. S. A. and Egypt. By reading this book children not merely know the cultural background of the countries visited but also their way of life and how far they have progressed during the last ten years, what methods they are adopting for the general uplift of their people, what these people think of India and the condition of villagers and villages, coin and their value as compared with Indian currency and so on.

The author also gives some valuable hints on travelling in foreign lands.

Informative and enlightening, this book makes an altogether interesting reading for anyone who would read it, be he a grown-up or a child. I would particularly recommend it for Indian children because it is easy to understand and written in simple, lucid Hindi.

Tara Tikku

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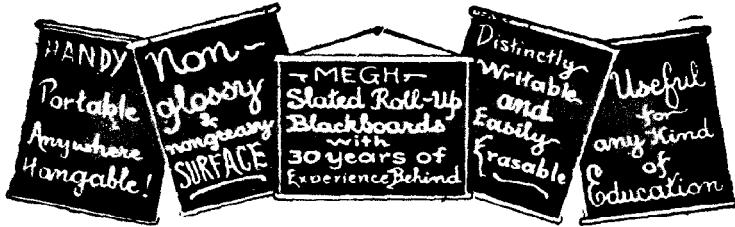
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No. F. 11-38/57-B.1  
Ministry of Education & Scientific Research,  
INDIA.

New Delhi-2, the 28th November, 1957.

The "JOTHI CALCULATOR" prepared by the MYSORE INDUSTRIAL CONCERNs has been recently brought to the notice of this Ministry. The apparatus which is a modified form of the ball-frames that are usually known as 'ABACUS' has been noticed with interest. The modifications made by the Mysore Industrial Concerns have brought about an improvement in the apparatus which has naturally resulted in an increase in the cost as well. However, it appears to be a useful device and institutions interested in its purchase will, no doubt, do so after examining it from every respect.

Sd: J. C. BOSE  
Assistant Educational Adviser.

To

SHRI PARAMASHIVIAH,  
Mysore Industrial Concerns,  
Dhanvanthry Road,  
New Municipal Buildings,  
Mysore.

P-293/3/58

# This Issue

THE idea of the multipurpose school to replace the existing type of secondary school, as recommended by the Mudaliar Commission, has been accepted by the people as a sound, constructive idea. But now and again it is a good thing to subject even the best of ideas to the close scrutiny of the critic's eye. In this issue the focus is on the multipurpose school. The article "Balance in the Secondary School Curriculum" discusses in detail the course content of the multipurpose school curriculum, the writer's idea being to emphasise the point that in any scheme of education, for any particular stage, "the subtle balance of subjects in the curriculum is vital and must be maintained." The author of "Why Do We Want the Multipurpose School?" poses a direct question to all those who believe in multipurpose schools to pause and think out their objectives clearly before going ahead with the reform so that in the process of establishing multipurpose schools they do not set up two parallel, competing systems of secondary education. The article "Diversification of Secondary Education" examines the multipurpose school from the sociological angle.

The discussion in our Reader's Forum still continues on the same subject, namely—is secondary education primarily a general preparation for life or is it a training ground to prepare a student for an occupation at the end of the secondary school career? Of the two contributors to the present series, one is of the view that the two seemingly opposed ideals are not really irreconcilable and that "the best education is a compromise of these ideals or rather a balancing of these ideals" because to be able to live a full life, it is as important to live intelligently as to work efficiently. The other contributor, however, is of the view that our country having chosen for herself the pattern of an industrial socialistic democracy, secondary education in India should be oriented increasingly towards training for employment. We shall welcome more comments on this subject for our next issue.

Art for art's sake is the approach advocated by all the three teachers writing on the teaching of art in the fourth series of articles in the feature "How I teach It". Another article of interest in this issue is the one entitled "Child-Centred or Class-Centred?" which discusses the modern psychological approach that ought to guide a teacher in teaching a child. Other articles of general interest bear on the organisation and administration of a school guidance programme, individual classroom projects undertaken by teachers and educational news from India and abroad.



Decorating *thalis* with  
*Rangoli*—A class in  
Home Economics  
(H. H. Chintamanrao  
Patwardhan High  
School for Girls,  
Poona)

## Diversification of Secondary Education

Young engineers absorbed in laboratory work in electrical wiring (Madras Christian College School, Chetpet, Madras.)



# Balance in the Secondary School Curriculum

"**M**OST proposals for the 'reform of the curriculum' aim at making the patient at home in the mechanism of civilization and adept in its techniques", writes Sir Richard Livingstone with considerable force. Indian educational thought is convinced that at the Secondary school stage diversified courses of study are necessary in the context of present day conditions to bring about the required adaptation to the emerging pattern of society. But though, enthusiasm for the implementation of the new scheme is essential for its success, an unthinking acceptance of the educational fiat of Boards and Councils will deprive the scheme of the spirit that originally made it significant—the spirit which inspired the recommendations of the Mudaliar Commission.

## The Unhappy Marriage of Practical and Liberal Education

Even in educational circles an oversimplified philosophy is being preached and accepted that education is the preparation for a future, determined by some vocational guidance expert and cumulative record cards. But because conservatism in educational ideals dies hard, the need for an admixture of a liberal education is also stressed. The result is the unhappy marriage of a practical and a liberal education, and the subjects of study which are the unfortunate issue of this union are being crowded together to create educational slums.

This is most unfortunate for, in the teaching approach to any scheme of education, for any particular stage, the subtle balance of subjects in the curri-

culum is vital and must be maintained. Teaching small parts of a large number of subjects results in the passive reception of disconnected ideas. A. N. Whitehead in his book "The Aims of Education" warns against inert ideas and consequential mental dryrot and suggests effective safeguards. He says: "We enunciate two educational commandments, '*Do not teach too many subjects*' and again '*What you teach, teach thoroughly*'. It is not for me to add to these gems of practical educational wisdom, but implied in these commandments is the belief that the learning of this subject or that is important only in so far as the subject matter itself opens up new vistas of active thought.

## Course Contents recommended by the All-India Council for Secondary Education

Against this background I shall now attempt to examine the scheme of studies suggested by the All-India Council for Secondary Education and to suggest means, based on practical educational considerations, to eliminate rigidity in the scheme and yet to attain the ideals sought to be achieved by the Mudaliar recommendations.

A.E.T. Barrow

The All-India Council for Secondary Education has recommended a course made up of ten subjects : Three languages (Hindi, Regional Language, English); Social Studies (History, Geography, Civics); General Science and Mathematics (Arithmetic, Algebra, Geometry, Statistics, Mensuration), Craft and *Three* Elective subjects, which may be Physics, Chemistry and Biology. The Council has recommended that all these subjects should be

## SECONDARY EDUCATION

studied throughout the Secondary stage (Standards IX, X and XI).

The time-table given below makes provision for the ten subject-scheme of the Council, and within the restrictive limits imposed, may be considered well-balanced, but it will show how utterly incomplete such a break-up will be for a full, proper, sufficient and satisfactory study of the Higher Secondary course.

Subject	Periods per week
First Language	5
Second Language	5
Third Language	2
Social Studies	2
General Science	2
Elementary Mathematics	2
Craft	4
P.T., Debates, Music, Social Work	4
Three Elective subjects (Physics, Chemistry, Biology): 4 periods each	12
	—
	38

The recommendations of the Science Seminar arranged by the Directorate of Education, Delhi (December 1956—January 1957) give an indication of the number of periods per week required for *Elective Science subjects*. This recommendation reads :

"After a good deal of discussion and calculation of the number of working

days available in a year and the number of periods required, the Seminar has come to the conclusion that the proposed syllabi in Physics, Chemistry and Biology cannot be fully and satisfactorily covered unless Higher Secondary schools have a three-period time-table out of which nine periods per week in Class IX and ten periods per week in Classes X and XI are allotted to each of the subjects to be arranged for theory and practical work at any time according to individual needs of the teachers concerned."

The findings of this seminar, which was attended by thirty-four Science teachers, support my own view that any attempt to teach ten subjects in all three classes of the Higher Secondary stage will lead only to a sketchy, superficial and inadequate treatment of them.

### Balance through "Staggering"

The balance in the curriculum can be maintained by "staggering" the subjects to be studied in each of the classes. This will also bring about a change in emphasis and intensity of study.

The following Scheme is based on the recommendations of the Inter-State Board for Anglo-Indian Education and is similar to the Secondary course envisaged by the Board of Secondary Education, West Bengal. The language pattern as represented in the scheme is that which pertains to Anglo-Indian schools in which English is the medium of instruction. It is further assumed that the Secondary course will commence in Standard VIII.

Subjects	Standards	Mode of Assessment or Examination
English Language	VIII—XI	External Examination
Hindi (or Regional Language)	VIII—XI	External Examination
Regional Language (or Hindi)	VIII & IX	Internal Examination
Craft	VIII & IX	Internal Assessment
Social Studies	VIII—X	Internal Assessment
General Science	VIII—X }	Internal Assessment
Elementary Mathematics	VIII—X }	Internal Examination
Three Elective subjects	VIII—XI }	External Examination

## BALANCE IN THE SECONDARY SCHOOL CURRICULUM

It will be seen that the scheme contemplates a gradual reduction in the subject-load : at the end of Standard IX the Third language and Craft are omitted; by the end of Standard X Social Studies, General Science and Mathematics are completed, and in the final year two languages and three Elective subjects are studied, these being offered for external examination.

The scheme affords, I believe, a practical solution to the problem of a crowded curriculum and will permit a free and liberal treatment of each subject, so that education will not deteriorate into a collection of scraps of material which must be "crammed".

A study of the scheme outlined above will also reveal a lightening of the external examination load. Classroom procedures and techniques will thus be freed from the hampering and restricting influence of the dead hand of the external examination. The true concept, of diversified courses will also be realised whilst at the same time, the essentials of a preliminary liberal education will have been purveyed. It is only in some such way that the pupil will have the advantage of freshness of approach in the liberal subjects combined with concentration, precise knowledge and appreciation of principles in those subjects in which his interests lie; thus will balance be achieved in the curriculum and also in the students' modes of study.

The examination schemes of certain examining bodies such as the Central Board of Education, Ajmer, and the Punjab University to have an external examination in nine subjects will inevitably kill the cherished hope of the original framers of the scheme that "the Secondary school may become a centre of joyous education related to life, instead of being merely a centre of dull and stereotyped instruction". (The Report of the Secondary Education Commission).

### Balance through Subject Exclusion or Fusion

The Secondary Education Commission

sought to achieve a balanced curriculum by excluding such of the core subjects, Social Studies or General Science and Mathematics, as are allied to the elective subjects chosen by a candidate. In this connection I would like to quote the relevant passage which reads : "A pupil taking up either History or Geography or Elements of Economics and Civics in the 'humanities' group will be required to take up the course in General Science and not in Social Studies. Similarly a pupil taking up the sciences under the 'science' or 'technical' or 'agricultural' group, should take the course in Social Studies, but not in General Science etc."

The Science Seminar, referred to earlier in the article, suggested a fusion of Social Studies and General Science to form a composite course of studies, and then recommended that certain portions of the composite course be excluded by candidates, based on the subjects chosen from the various groups. To this effect the report of the Seminar states :

"What constitutes a major contribution of this seminar is its recommendation that Social Studies and General Science subjects should form a composite course consisting of the following :

- (a) Botany, Zoology, Geology, Agriculture and Astronomy—compulsory for all students.
- (b) Physics and Chemistry only for non-Science students.
- (c) Social Studies only for Science students....."

The point I wish to emphasise is that especially in "core subjects" there should not be any rigidity. In these subjects it is essential that the contents of the curriculum should be evolved for each school, by its own staff, based on its own needs. Each school must have the right to prepare its curriculum in relation to its own particular circumstances. In our pre-

sent state of school development it may be necessary to have such curricula approved but the imposition of inflexible courses of studies by Education Departments would interfere vitally with essential freedom in education.

The ideal in education would be that each school should grant its own leaving certificates based on its own curriculum. It is an ideal far removed from educational reality in our country, but in the matter of "core subjects" schools should be permitted to exclude or fuse portions of curriculum to give to teaching, a vivid freshness and to their pupils, the sense of wonder and appreciation.

### **Balance through Time-table Organisation**

Another method of ensuring the essential balance, emphasised in this article, is to organise the time-table in such a manner that it is "set" for certain subjects. The term "set" or "setting" signifies that the time-table is arranged (or set) so that the same subject will be done by one or more standards at the same time, enabling a pupil to transfer from one 'set' to another 'set' of his own standard in that subject.

This method of "setting" is used effectively in a form somewhat different from that suggested here in Comprehensive schools in Scotland, Wales and some of the larger cities of England. As our "Multipurpose school" idea is based on the Comprehensive or Omnibus school scheme of the United Kingdom, the procedure of "setting" may well be adapted for our purposes. "Setting" will, I feel, be most useful in the learning of languages.

It will afford courses of varying difficulty in the same subject to suit the individual needs of pupils. It is recognised that it can, at best, be a means only of helping pupils to reach the required standard in any subject, but it is nevertheless a valuable yet subtle means of ensuring balance within the syllabus.

### **The Three-Language Formula**

The question of language study is strictly not within the scope of this article but I feel that the imposition of three languages in every class at the Higher Secondary stage will result in curricular imbalance. On this subject the view of the Secondary Education Commission is thus expressed : "We are definitely of the opinion that the curriculum should not be loaded with too many languages and while a majority should only study languages which are absolutely essential, those who possess linguistic ability should be able to take an additional third language."

Political considerations may make the study of three languages necessary in India, but to conclude, therefore, that three languages must be studied by every pupil at the Higher Secondary stage is to sacrifice educational principle at the altar of political expediency.

It is declared by eminent persons in India from time to time that in countries like the United Kingdom, Belgium and Switzerland the study of three languages is normal. A proper appraisal, however, of the position shows that at the Secondary stage, only the students within the highest intelligence quotient bracket, marked "Superior", are actually found capable of learning three languages.

To be guided by public men does not mean that the teacher and educator must abandon the right—the right which is pre-eminently that of the teacher—of determining on psychological and educational grounds the stage or stages at which languages may be studied most effectively. "Lack of attention to the rhythm and character of mental growth is the main source of wooden futility in education" cautions Whitehead. Indeed, the learning process can be gravely hindered by introducing a subject or subjects at an inappropriate stage of mental development.

On this subject of language study Dr. Wilder Penfield, the well-known

neurologist and brain surgeon, has the same views to express. According to him, "The time to begin what might be called a general schooling in Secondary languages, in accordance with the demands of brain physiology, is between the ages of four and ten. The child sets off for school then and he can still learn new languages directly without interposing the speech units of his mother tongue." Continuing further, he says: "It may be convenient for those who plan the school curriculum to postpone the teaching of Secondary languages until the second decade of life but the plan will never do what we should like to have it do. It defies the laws of progressive change in the capacity of the brain".

An analysis of his theory reveals four positive features :

(i) The appropriate period for the study of Secondary languages is between the ages of four and ten.

(ii) The language units of the mother-tongue are not interposed in the learning of new languages.

(iii) The language units thus recorded in the brain can be developed with relative ease at any time.

(iv) Subsequent teaching may be in any of the languages learnt in the first years.

Present practice in Anglo-Indian schools supports this thesis and, I believe,

that on psychological grounds the practice of introducing languages successively in the primary stage of school life is sound.

My plea, therefore, is that the second language may be taught from Std. II or III to Std. XI and the third language from Std. IV or V to IX, but that after Std. IX, *two* languages only should be studied by most pupils and *three* languages by those with distinctive linguistic ability.

### Conclusion

The theme of my article needs no reiteration but I do wish to emphasise that whilst planning in education, one has to be aware of the fact that in education more than in any other sphere there is the hidden danger of duplication and the unsuspected danger of overcrowding.

Nothing can be more frustrating than to study a subject that is boringly similar in content to something done before, whilst overcrowding the curriculum is not only stifling but results ultimately in educational waste.

Plans and purposes, therefore, if not wisely adapted, can destroy initiative and originality. The principle of adaptation is an essential complement to planning ; it is the principle which alone can bring the touch of reality to education.

'They know enough who know how to learn.'— Henry Adams

# WHY DO WE WANT THE MULTI-PURPOSE SCHOOL?

**W**HOMO wants the Multipurpose school? I am asking this question now. I am sure it will also be asked twenty years later, in a different tense, in a different tone, and perhaps with Multipurpose education staring at us stupidly from all sides.

## Who wants the Multipurpose school?

Do the parents want it? I do not think so. I have yet to meet parents who want education for their children. What they want for them, if they are ambitious, is a career, and if they are fastidious, fluency in English. They send children to school out of habit, and they do not want problems. If a child has been admitted to a school and is paying all dues, the rest is the school's business.

The child should do well at the examinations, and get promoted to the next class every year. If

that does not happen, there is something wrong with the schools. If it goes on happening, any school is good enough. This may appear an unfair appraisal of parents and their motives, but I believe most headmasters will confirm it. And we should not consider this a disadvantage. Parents with opinions about education can do much worse.

Why should parents want Multipurpose education in preference to the prevailing or to any other system? They are only interested in results, and Multipurpose education is still too much of an idea for us to talk convincingly about results. But parents will object to more expenditure on fees or books. It is quite obvious why.

Do the teachers want Multipurpose schools? There may be a few who do. There may be a few more who can be induced to want them. But by and large the majority of teachers are either without a positive opinion or they are sceptical about it. After all, come to think of it, the teacher has to work under circumstances in which the transmission of knowledge cannot be efficient, and the more difficult process of inducing the acquisition of knowledge, of stimulating all forms of mental activity from somewhere in the background is hardly to be thought of and we on our part do little or nothing to improve the conditions of work so that teachers may well suspect us planning another means of escape from reality whenever we propose a scheme for better education.

By

**M. Mujeeb**

The administrators are harassed, desperate. 'Ordinary' education, which no one with any reputation for knowing

about education seems to want, is not expanding fast enough. Even if it did, it would be of no account to those planning better education. The administrator would still be accused of complacency, or still worse, of wasting his and the nation's time. Anything that has become routine is no longer creditable work. The administrator will have to want Multipurpose schools, and the schools will suffer for it.

The universities readily admit that standards are falling. They can prove that the reason for this is the low academic attainment and the immaturity of those who come to them for admission. They cannot raise the standard of Secondary education. They cannot resist the logic of having the regional language as the medium of Secondary

education. They cannot deny the fact that a good knowledge of English is essential and indispensable for higher education in all subjects. The books taught in Secondary schools have been mostly written by university teachers, but the universities do not consider it their function to provide more and better books for the Secondary school students or for their own. There is perhaps no country in the world in which concentration on teaching is as exclusive as it is in India. Nowhere does academic freedom mean such complete freedom from responsibility. The universities want routine expansion, if they want anything at all. They will do their best not to want the Multipurpose school.

### The Multipurpose school and Secondary education

In spite of all this, however, we must have Multipurpose schools. If they can only be built out of savings or out of sacrifices, I would not think 1000 Primary schools or one university too high a price for 20 good Multipurpose schools. I say so because I am convinced that our future depends upon the quality of our Secondary education.

The mistake we can make, or, to be quite frank, we have already made, is to create by implication a distinction between Secondary education and the Multipurpose school. The Secondary Education Commission has done its work thoroughly and ably, and the work has been followed up by the preparation of very good syllabuses for all subjects. To reduce its recommendations to the setting up of a few Multipurpose schools is to undermine the whole of Secondary education as now being given for the sake of an experiment or to endanger a valuable experiment by isolating it from the milieu to which it belongs both naturally and logically.

As a member of a sub-committee of some board, I was called upon to compare the syllabus recommended by the Secondary Education Commission with the pre-

vailing syllabus and make suitable changes in the syllabus proposed by the Commission ; further, to consider ways and means of carrying out the Union Ministry of Education's directive to establish two Multipurpose schools. It was not contemplated that any member of the sub-committee would ask questions. It was assumed that the syllabus suggested by the Secondary Education Commission would have to be amended because it differed from the syllabus in force in existing schools. It was assumed that two Multipurpose schools would have to be established, even if the university to which those who graduated from them would seek admission was officially unaware of their establishment, and even if the equivalence of the Higher Secondary and Multipurpose school certificates had not been agreed upon. It was a matter of surprise that such questions should be raised. The possibility of introducing the core subjects proposed by the Secondary Education Commission in all Higher Secondary schools as an alternative to setting up a parallel system through the establishment of two Multipurpose schools had not been considered. After all, we do keep on reminding each other that it is a bad habit to anticipate difficulties. It may mean less strain on the nerves if, three years later, small special universities have to be established to absorb those who have passed through the Multipurpose school. If we do the thinking now, some years before it is necessary, we shall only be clarifying ideas ; later, we shall be fighting for a good cause. Who would think twice before making a choice ?

### It must not go the way of Basic education

Still, forebodings of what might happen make me shudder. I even think of what has become of Basic education. Those who spoke for Basic education were the best prophets of a new age. Where are they now ? And where is the new age ? Who can now define Basic education ? Who is satisfied with the average Basic school ? Who has found

Basic education being given willing recognition by High schools? It is now all a matter of adhering to the beliefs of a sect one was born in, of insisting that some of its tenets have universal validity. The Multipurpose school has no spiritual sanctions behind it. It cannot become the source of a cult. It is not the slogan of a party. But that does not ensure its success. It still runs the risk of having to fight for its existence, not as an idea, but as a commitment. Directives are being issued to public schools today to introduce Basic education. Will it not come to pass, twenty years hence, that directives will be issued to all good Higher Secondary schools to introduce Multipurpose education?

### Necessary to have clear objectives

Why should we not be clear and precise about our objectives now? We do not want parallel, competing systems of Secondary education. We should not, therefore, set up separate Multipurpose schools as rivals to the Higher Secondary schools, as institutions that arouse envy and jealousy because the Government looks upon them with favour. It is the diversification and the syllabus that are important, not the existence of the Multipurpose school as a separate entity. Those who do not accept the principles underlying the scheme proposed by the Secondary Education Commission do not accept the need of Multipurpose schools and will not be honest about establishing them.

The first step should be to introduce the core subjects of the Commission's proposed syllabus in all Secondary schools. We shall then have a minimum of uniformity and also prepare the ground for further improvement and expansion. This will no doubt be difficult, but to evade this difficulty will be to jeopardise the future of a sound, diversified education. The

next step would be to bring the syllabus of Secondary education in all States as close as possible to the Commission's proposed syllabus, and to ensure the equality of academic and technical attainment in all the Secondary schools of India. Then, as means allow, more and more schools can be provided with the buildings, the equipment and the staff necessary to convert them into typical Multipurpose schools. We may, in this process, not only have the schools we want, but also generate the enthusiasm and create the competence required to make them efficient and effective centres of education.

One need which we shall be unable to fulfil if we begin with small numbers of Multipurpose schools is the preparation of textbooks and supplementary reading material. Basic education has suffered because suitable books were not provided. The Multipurpose school will not only suffer but die of starvation if it is given the same treatment. If there is a central organisation making use of the existing machinery in the States for the appraisal and approval of textbooks, it will be possible to work out in detail the specialised courses of the different groups of subjects in such a way that the real aim of the Multipurpose school is achieved, and the inner unity of the different branches of knowledge is impressed upon the mind while special aptitudes are being developed.

It is not a secret that almost every Indian State has its own educational policy, and soon there might be such divergences as to reduce Indian education to chaos. Should we not take advantage of whatever willingness there is to establish Multipurpose schools to introduce essential unity and uniformity in the whole structure of our national education?

# READER'S FORUM

## EDUCATION AND EMPLOYMENT

*This is the third series of discussion on the subject—to what extent should Secondary schools prepare a student for an occupation at the end of his Secondary school career? The point at issue is whether Secondary education should primarily be a general preparation for life or whether its main stress should be on the training of a student for a particular job. The contributors to this series are Dr. Clyde B. Myers, Secondary Education Adviser to the American Technical Cooperation Mission in India and Shri S.C. Sen, Principal of the Delhi Polytechnic. Dr. Myers feels that the best education is a compromise of these ideals or rather a balancing of these ideals because to be able to live a full life, it is as important to live intelligently as to work efficiently and well. On the other hand, Principal Sen is of the view that our country having chosen for herself the pattern of an industrial socialistic democracy, Secondary education in India should be orientated increasingly towards training for employment.*

*Our readers' comments, which must be brief and to the point, are invited. These should be typed and addressed to the Editor, "Secondary Education," Ministry of Education, New Delhi.*

### Clyde B. Myers

#### Goals of All Education

CENTURIES ago the two great goals of education were incisively stated as learning how to live and learning how to earn a living. It is because we have to be always balancing these two goals of education in the structuring of our educational organization that difficulty arises. Different countries and different cultures set the structure up with different weightings for these great goals. Yet no good educational organization ignores wholly either one in the twentieth century.

Out of this problem of balance have grown two great schools of thought on educational structure.

One school would place the heavy emphasis on the making of the man. It concerns itself with the reason for living. It seeks the justification for existence of the ego in time and space. Why am I here? Out of it must come the logical

integration of parts which make up a personal philosophy—a system of ethical and spiritual values. If this is accomplished, the argument goes, the ways and means of earning a living are readily acquired by experience.

The other school of thought sometimes goes to the other extreme by brusquely inferring, if not openly stating, that earning a living for oneself and family and the educating of one's children are the big business of life. If we do this skilfully and effectively, along the way we will, from experience, gather together a pattern of values for living that will be pretty satisfactory.

The first school of thought would give everybody general education climaxed by Liberal Arts on the university level—culture, philosophy, religion, etc. would be heavy components. From this broad base, they argue, one can rather easily manoeuvre oneself successfully into nearly any profession or

job. A degree, most any degree qualifies one for most any job. One could be introduced to skill opportunities in the educative process but the high skills must be learned on the job itself. School shops and laboratories are to reinforce theoretical knowledge by the psychological principle of learning by doing. Beyond this, shops and laboratories have largely a vocational interest of a general educational character. The leadership of the Eastern world in religion and philosophy is a tribute to this pattern of education.

The other school of thought tries to get the student rather early to come to a decision as to his life work not only in broad fields like Science, Mathematics, Engineering, Medicine but often to specialized sectors of these general fields like petroleum engineering or brain surgery, etc. Once this decision is made, the pattern of the student's education starts to focus ever more sharply on the specific sector of expertness at which the student wants to arrive. To avoid frustration that follows failure the specifications for the given expert job must be known and the student's capacity, aptitudes, attitudes and willingness to pay the price in money, time and effort measured against these requirements. It is tragic to spend all the money, time and effort for a given expert job and then find out that one is lacking in some vital qualification which precludes success. But if he does have the qualifications he may obtain rather amazing success in a narrow, specialized area. To this school of thought, formal education must provide everything possible to further this concentrated effort. The shops and laboratories, besides being aids in the learning process, become the places where highly developed skills are obtained. As much skill is secured vicariously as possible, only the last percentage of experience is left to apprenticeship training on an actual job. In a high priced labour market with heavy capital investment in machinery and equipment, only the efficient can be tolerated. Too much is at stake to take chances with

the untrained and unskilled. The great material successes of Russia and the large part of the Western world have resulted from this pattern of education.

Thoughtful educational leaders have long realized that the optimum education cannot be produced by the extremes of either of these seemingly opposing ideals of education. As previously suggested, the best education is a compromise of these ideals or rather a balancing of these ideals into an optimum pattern for a given nation. Nearly all of us have to learn to get satisfactions out of living; at the same time, we have to support our families decently and educate our children. A compromise of ideals is forced upon us.

### **Employment**

Employment has a direct relation to the pattern of education that has been established. The established pattern of education is directly related to the philosophy of education that prevails. Education is not an end in itself; it is a means to an end or several ends. Saying it another way, the structure of the educational system is determined by what a given society wants and needs as an end product—what balance it desires between spiritual and material values. This is true for the individual also. We shall have to analyse both employment and unemployment in these terms. Education is merely the vehicle to accomplish what a given society wants or needs. Unemployment in India provides a good starting place for an appraisal of the educational system.

### **Unemployment situation**

The National Employment Service of the Ministry of Labour in "The Pattern of Graduate Unemployment" makes the following statements :

"According to the estimate made by the study group 5.5 lakhs (550,000) educated persons were unemployed in the country in 1955 having an educational qualification of Matriculation or

above. Of these about 1.2 lakhs (120,000) were graduates (university graduates) on which the nation has spent fairly large sums of money as an investment and from the educational point of view they represent, by and large, the cream of our manpower resources." Of the total of unemployed "the number of graduates, honours graduates or post-graduates who were unemployed was the highest among those holding a degree in arts subjects (58.7%); the number of science graduates who were unemployed was higher (26.3%) than commerce graduates (15%)." These three groups represent 84% of the unemployed graduates.

"Among the unemployed graduates with a B.A. degree, a large number had specialized in Economics, History, Politics and Philosophy. Among the unemployed graduates who took a B.Sc. degree, a large number had specialized in a combination of Physics, Chemistry and Mathematics. Among M.A.'s who were unemployed a large number had obtained the degree with specialization in Economics, History, Politics and Hindi. Among M.Sc.'s who were unemployed a large number had specialized in Chemistry, Mathematics, Physics and Zoology."

Perhaps the saddest part of this picture was that "among the graduates 60.4% sought employment in clerical posts.....Nearly 95% of those seeking clerical posts were graduates with Bachelor's degree in Arts, Science and Commerce. Only 19.5% sought jobs in professional and technical posts; 15.7% in administrative and executive posts."

It is dangerous to draw too easy conclusions, but it does seem that three fundamental elements of the educational system are unsound that produce such conditions of unemployment.

*Firstly*, an educational product has

been created for which there is no demand or market. The individual has been taught the meaning of life but has not been taught how to make a living. This can be very tragic.

*Secondly*, an educational product has been created in which the individual has not been trained to do any single thing well enough to be marketable. The individual has to start at the bottom to learn high skills or specialization that can be marketable. As long as there are others who do have skills or a specialization, they will get the jobs and the person who has neither will remain unemployed. (This is the working of the law of supply and demand). The belief that if you have a degree that you are prepared to do most anything does not seem to work under real conditions in India.

*Thirdly*, an educational product has been created in which personal initiative, spirit of confidence in self and the temper of adventure and enterprise have not been encouraged and nurtured. 60.4 per cent of the unemployed graduates sought employment in clerical jobs. It seems the educated man wants security above everything else. He seems to be afraid of tomorrow. There may be reasons for this fear but this was not the adventurous spirit that spread Indian culture, religions and tradesmen all over the Eastern world. The business of education is to nurture initiative, stir the imagination by the lure of the unknown and the unmastered, open the eyes to new opportunities in which to invest one's life and abilities, create the determination in the individual to take chances (calculated chances) in high endeavour for possible personal gains but incidentally for the benefit of the nation also. To be satisfied with a clerical job appears to be selling the nation short on its money investment and its logical hope for large dividends from the university graduate.

If the inferences drawn are reasonably trustworthy, it follows that the educational system is not producing the university man that India needs. The

results in Secondary education reinforce this conclusion.

### Weaknesses in Secondary education

Secondary education appears to the outsider to be a screening process for two objectives. First, to screen out the superior intellects—the brightest minds; and second, to steer these brightest minds into the university to provide professional leaders in various fields.

Even this, the Secondary school at the moment is failing to adequately accomplish. Of those who enter the first standard, less than 3 per cent graduate from High school. Only about 60 per cent of these go on to the university. Because only about 50 per cent of the children in the age group are in the first standard, the percentage who graduate from high school is 1½ per cent of the age group and those who enter the university less than 1 per cent. Those who graduate from the university represent a much smaller fraction.

It has been established by many scientific studies that a cross section of an age group shows mental ability to fall into what is called a normal distribution curve. If one is seeking the geniuses and near geniuses, they represent about 7 per cent of the age group. The above average group, below this genius group, represents about 13 per cent more. So there is a total of about 20 per cent of the student population that is above the 60 per cent who are in the average group. The present Secondary school is screening out about 1 per cent. There is at least that percentage in the genius group. Does the present organization believe it has screened out the geniuses only? What the Secondary school would probably claim is that it is screening out the above average students. There is 20 per cent in this group, not 1 per cent.

### Basic psychological factors in success

It should be observed in passing that there are two basic psychological elements

to success. One is mental ability or capacity; the other is what psychologists call drive. In research studies of the above average students, it was found that a percentage did not succeed well because they did not have drive—the will to sustained effort, orderly concentration on the job at hand.

The other side of the picture has been found equally true. Many men of very average ability have succeeded in a big way, because they made up in drive, in will power, in concentration for any lack in ability. Any classroom teacher has seen these situations unfold before his eyes many times. This should give us pause in being too rigid in our thinking.

To put the matter of weaknesses of structure negatively, better than 95% by graduation day in High school have fallen by the wayside. This is the kind of luxury education that even the richest nations in the world cannot afford. If one charged the cost of education against the few who graduate from High school or worse yet who graduate from college, the per capita cost would be staggering.

Of course, it will be argued that those who dropped out along the way got something of worth. They at least learned to read, write, compute, etc. This cannot be denied. But the question immediately arises: Did they get what they needed to face life?

### Education that prepares for employment

If the present Secondary school's main concern is with the 20 per cent that are above average in intelligence, the question then poses itself—What kind of education should the Secondary school provide for the 70 per cent who do not have this ability? In the present stage of progress in Secondary school, what about the 95% who fall by the wayside? Even with a ruthless application of the principle of the survival of the fittest, there should be concern about the less fit. At least 60 per cent of these have average ability. It

is rather obvious that a very large percentage of these are not interested in going to college. What is being done to satisfy their needs and interests? The answer is pretty clear. Provide for the great majority of these broad opportunities in vocational education—skill training, high skill training. There is a market for the master mechanic.

To think of vocational training as post-Secondary, as suggested by some educational leaders, may be something of an ideal but it is not realistic for a number of reasons, among which are :

1. The student's investment in time, money, and effort will be so great that he cannot afford to be a mechanic even if that is his real interest.
2. It is the experience even in countries with advanced educational systems that actual farmers, skilled mechanics, clerks, bookkeepers, stenographers, nutritionists, etc., come out of High school. In such countries the university graduate does not go back to such jobs.

Unemployment below the university level is also rather overwhelming. One can pass this off by saying there are simply not enough jobs in India to furnish work for everyone. This seems to be true and if so, it poses a challenge to the educators to help to do something about it.

The present concept prevailing seems to be to train students for the jobs which now exist. This does not obtain for Secondary education as it appears to have the single purpose of preparing for college. But on the university level, there seems to be conscious effort to train in terms of need, at least partially. The emphasis on Engineering is a case at hand. Jobs do exist for which there are no adequately trained candidates. In the Five-Year Plan certain needs are anticipated. These are jobs in being.

It would seem that in line with former comments, Secondary education has two big jobs that it is doing very inadequately at present. The first is to prepare for the jobs which now exist as adequately as possible. This means vocational education that produces real skill—the kind needed by a master mechanic. This is appreciated by Indian leaders as indicated by statements in the Report of the Secondary Education Commission, hereby quoted :

"It is common ground that in the Secondary stage of education, there should be increasing diversification of courses so that students can be trained in divergent vocations according to their interests and capacities. The requirements of teachers, workers in vocational extension and community development project areas, cooperative personnel, revenue administration, technical and supervisory personnel in industry, agriculture and other fields of development have to be mainly from the age group 14-17 years."

"We expect that at the successful conclusion of the Secondary course a majority of the students will take up some suitable vocational pursuit. This postulates that our Secondary schools should no longer be 'single track' institutions. They should provide both general and vocational subjects and pupils should have an opportunity to choose from them according to their needs." "It (Secondary school) endeavours to provide for each individual pupil suitable opportunity to use and develop his natural ability, aptitude and inclinations."

The second job of the Secondary school is even more challenging. It has been already discussed under university unemployment—the release of the student's powers of creation and discovery. This is not easy but is the real compensation of the great teacher. Abilities, aptitudes, interests of the student must be evaluated. The student must be

guided into a field of interest that uses his abilities and aptitudes in the highest degree. If done wisely, the world unfolds for him with surprising vistas. Powers in the student emerge that he did not know he possessed. Initiative and a confident approach to problems and difficulties result. He is no longer afraid of risks. Adventure and the lure of discovery beckon on. Security is no longer a fetish.

## II

## S. C. Sen

**A**N ideal democratic state must be an industrial society, in which every citizen must be a worker, contributing enough in goods and service to society to earn his livelihood and every worker must also enjoy the political rights and cultural interests of a free citizen. To achieve material and cultural progress swiftly and surely, India has chosen for herself the pattern of an industrial socialist democracy.

Technology is dynamic, and an industrial society survives by continually adjusting its social thinking and institutions to rapid technological changes. Each technological advance requires higher and more complex skills, to meet which both general education and vocational training of workers are required. \* "Technological advance and educational advance must go hand-in-hand and..... education in the automatic—atomic age must be improved in quality and broadened in scope and outlook. Training (vocational) is education and we must see that the training of youth is a truly enriching educational experience and is given the priority it merits." Continuing, the report says : "Often, however, and particularly in the less developed countries, there is considerable unemployment among the educated classes side by side with shortage of technologists and other kinds of highly skilled workers. This seems to indicate some lack of balance

and flexibility in the educational system, which in many countries may slow down the rate of technological advance and make adjustment to change more difficult." India is a large country crying for development. Her educational system must serve her growing industrial society.

But then, what about education for 'leadership'? In feudal days a ruling or military class might have exercised 'leadership' over a working or fighting class. But nowadays, under the stress of economic factors, even popular political leaders are losing importance. A Central Minister recently expressed the hope to me that within 10 years the public and the press would talk much less of politicians than of persons outstanding in other fields of endeavour. A modern industrial democracy must throw up persons of vocational or professional training and competence as 'leaders.' So, the education that makes a person vocationally competent must also make him ready for leadership.

Vocational training to 'work' efficiently and general education to enjoy 'living'—is an outworn argument. There is no set pattern for 'living.' The athlete, chess player, reader, writer, actor, singer or the social worker—each will use his spare time in a different way, but one factor is common—the capacity to create and excel which gives real pleasure only competent work can give. Generally speaking, in an industrial society a person who is kept busy in his vocation will also 'live' fully. Ivory tower general education will neither meet the material needs of modern society nor throw up leaders of an industrial state or even increase the capacity to live satisfying 'lives.'

Shri Natarajan's concept of broad general education for its own sake does not appeal to me.\*\* Secondary education in India should be oriented increasingly towards training for employment and in doing so, need not lose prestige.

\*D.G.I.L.O.'s report 1957 Part I—Automation & other technological developments, Chapter V.  
\*\*Please refer the April '58 issue of 'Secondary Education'.

The Secondary Education Commission has recognised this fully. In the concluding paragraph of Chapter III—Aims and Objectives—of the report it says : "The Secondary school must make itself responsible for equipping its students adequately with civic as well as vocational efficiency—and the qualities of character that go with it—so that they may be able to play their part worthily and competently in the improvement of national life." India's Second Five-Year Plan supports this view and summarises it in the Sub-Chapter on Secondary Education on pages 508-9—"They (the Secondary Education Commission) did not contemplate any artificial division between 'general' or 'cultural' education and 'practical' and 'vocational' or 'technical' education."

The proposed setup of Secondary education for the country is generally comprehensive and satisfactory. Most States are now establishing Multipurpose schools, Technical High schools and Rural Agricultural schools. The curricula, however, are designed largely for college entry and shop practice content is rather meagre (about 10% in the Delhi scheme). Consequently, direct employment of pass students into industry or commerce will not be generally easy. In Vocational High schools of U.S.A., 50% of school time is devoted to 'shop practice,' 25% to related subjects, e.g., Mathematics, Science, Drafting etc., and the remainder to English, History, Physical Education. On passing out, a Vocational High school student may join industry directly and subsequently improve his/her skill and theory by taking evening adult vocational instruction. In India, Junior Technical schools are probably meant to do likewise. Naturally, the instruction has to be largely in the mother tongue of the student. I suggest that these Junior Technical schools should be known as Vocational High schools and offer vocational courses of many kinds other than merely 'Technical' courses. Further, there should be provision for reciprocal transfer of students between ordinary High or Higher Secondary schools and

Vocational High schools by going through extra short period courses on part-time or full-time basis to bridge the difference. Thus, a Vocational High school boy may prepare for the university and an ordinary High school boy for a vocational career at will.

To start with, such Vocational courses may be in trades like the following :

Automechanics ; Carpentry and Cabinet making ; Industrial Electricity ; Industrial Electronics and Radio ; Machine Drawing ; Architectural Drawing ; Machine Shop Practice ; Painting and Decorating ; Plumbering ; Printing ; Upholstery ; Sheet Metal ; Welding ; Industrial Chemistry ; Commercial Art ; Clerical ; Salesmanship ; Stenography ; Tailoring (including power sewing).

For girls specially : Needle Trades (including tailoring and power sewing); Practical Nursing ; Dietetics ; Typist ; Telephone Operator etc.

It may be argued that not many boys and girls will opt for such Vocational High school courses. I do not agree. Industrial growth will create more vocational than purely clerical jobs requiring special training and skill. Further, the reported decision of the Central Government not to insist on a university degree for many of their services, compulsory schooling upto 14 years and the introduction of a core craft in the Middle school stage will draw progressively more and more pupils to Vocational High schools than to orthodox schools.

But education alone, even if it is Vocational education, cannot create new employment ; and more employment, particularly vocational employment, will demand more and more diversified education. India's economic planning is based on an intelligent assessment of the country's material requirements and resources and on a boldness to take calculated risks. The present economic backwardness of the country requires

## SECONDARY EDUCATION

social changes at a much faster rate than in Western Europe and U.S.A. at the beginning of their industrial revolution. Otherwise, India's continued poverty will cause an ever-increasing political and economic instability at home and abroad, leading to disastrous consequences.

We must, therefore, anticipate a re-

volutionary industrial, agricultural and commercial, and cultural regeneration of the country and prepare educationally for it. Our Secondary education will do well to put increasing stress on the preparation of youth for vocational careers, without neglecting essential cultural values.

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"Speech belongs half to the speaker, half to the listener".

—Montaigne

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*In teaching the child, should our approach be*

## CHILD-CENTRED OR CLASS-CENTRED?

OUR concept of education and educational institutions has passed through two stages. We are now in the third stage, if I may say so. There was a time when children were considered to be passive creatures, on whom we had to impose many things which we considered good for them. This was the first stage. After that came the stage when the child and his personality received more attention. The orientation was towards the child. We tried to understand the child, his needs and abilities. We tried to modify the content of our teaching to suit the child. We developed new methods and techniques of presenting to the child what we still thought was good for him. The common characteristic of both these stages was the emphasis on teaching the child. Now our educational thinking, mostly with the help of psychologists, has brought us to the third stage. In this stage the emphasis is neither on the individual child alone nor on the curriculum, nor on the methods of teaching, nor on the teacher alone. We have now come to consider the classroom as an active and significant social group. We have begun to realise the importance and the potentialities of the various social forces and interactions that are at work within a classroom. Pupils affect each other and whether we are aware of it or not, they affect the teacher also. That the teacher influences the pupils needs no mention.

### Group structure is an important factor

We also know that the social forces thus released within the group are very

important for the real training and development of the pupil's personality. No modern teacher will be content with the teaching of a particular syllabus in a subject. Every teacher, even the one who has not deliberately and consciously reached the third stage, will be placing before his pupils a number of social and moral principles which he would like them to learn. These things may be done in an organised manner in a class on social studies or moral instruction. More often, such things may be passed on in a casual manner during other classes also. But what the pupil really learns from such deliberate or casual attempts will depend to a large extent on the kind of social groups he finds within the classroom and his school environment. In other words, it is not the individual pupil alone but it is also the

group structure that has developed within the class which should be constantly kept in mind by the teacher. There is a good deal of truth in saying that our education should be child or pupil-centred. Most of us know what is meant by it and it is certainly a good principle. But the child as a unit cannot be really taught except in the context of the social group and the social forces that have evolved within a class. The teacher might emphasise the principles of democracy. He might emphasise the principles of cooperation. He might equally emphasise the principles of justice, social sense and freedom. But he can be absolutely sure that the child will not assimilate these principles into his way of life and thinking unless he feels and lives out these truths within the social group of the class.

Teachers should try to understand the psychology of group formation and group behaviour. With the help of simple questionnaires and sociograms he should have a very good picture of the various forces that operate within the class. He should know how pupils affect each other and how sub-groups are formed within the class and what kinds of leadership are available among the pupils. Some years ago, we were told that the teacher should not only know his subject matter but also the pupil. Now we know that it is not sufficient to know the pupils as individual children with their abilities and difficulties. It is equally important to understand all the pupils together as a social group affecting each other.

As a member of a social group, the individual pupil should be viewed as a future citizen. He should be trained in living as a citizen within the scope of the classroom. The teacher is in a good position to give this training. Since all teachers study psychology, the fact of individual differences will be appreciated. Keeping this in mind, the pupils should be trained in cooperative endeavour to achieve common goals. But, in any group there are bound to be some individual pupils who have gifts of leadership. It is the duty of the teacher to be on the lookout for such future leaders and give them the necessary encouragement and training. Cooperation is necessary and should be encouraged. But this should not be done at the cost of training real individual leaders who are equally necessary for society, democracy or no democracy. Even the methods adopted for training in cooperation should aim at inculcating in each individual the attitude and habit of doing his best and setting higher standards and goals for himself.

### **The teacher is part of the group**

Teachers should not make the mistake of thinking that the pupils alone form the social group. The teacher also must become an active and welcome member of it. By his very position, he is a leader who has great authority and power.

This position of leadership should be very carefully exercised and should often be forgotten for the simple reason that the teacher is not a leader chosen by the pupils. He has to make himself accepted as one. He often forgets that pupils also are very sensitive to our personal behaviour and characteristics. In other countries several investigations have been undertaken to find out what kind of qualities and characteristics the pupils like and dislike in a teacher. Though we do not have any notable study of this type in our country, we can certainly learn about these welcome traits from books on educational psychology. It may be a helpful exercise for every teacher to rate himself on such characteristics and traits that are liked and disliked by pupils. In other words, the teacher should try to understand himself as the pupils see him as a member of that group.

Most teachers would have learned from their courses on educational psychology that the teacher should not assume a dominant and authoritarian role. Even the programme of teaching should be a matter of participation of the whole group, with the teacher as an adviser or guide. In any class in which the teacher assumes the authoritarian role, the pupils learn to take a passive role leading at best towards submission to authority. Under such conditions no proper social relationships within the group will be formed at all. The pupils will not get the right type of experience in democratic social living in spite of the fact that the social studies teacher will be giving them a good many maxims. Experiments have shown that when the teacher takes the role of an autocrat, pupils become irritable and unwilling to cooperate with each other. They develop very little initiative. For things that matter in life such a teacher will seldom be accepted as a guide and example.

### **The school as a social group**

We have considered so far the single class as a social group. But the school as

a whole is also an important social group which helps the pupils to learn social values and real democratic principles. Here again, the responsibility of the teacher is very important. What the headmaster or the senior teacher advises the pupils in the daily general assembly (if there is one) does not have much effect on the pupils of the school. They learn very little out of such lectures and sermons. The social life of the teacher within the school and his relationships with fellow teachers and the management are what matter in teaching the pupils social values and democratic living efficiently. Jealousy, quarrels and feelings of animosity among the staff greatly spoil the work of a teacher. He might be very efficient in teaching his Mathematics. But such a teacher can be sure that he has taught practically nothing of real value. In fact, such undesirable characteristics in a teacher will always be reflected in the group life that is formed among the pupils within the class and the school and these experiences are bound to be felt by the young boys and girls with whom he is in daily contact.

Too often, the social sciences are

taught as part of a syllabus which the pupils must master from the point of view of the examination. Academic knowledge of social principles and values which can be shown in an examination is completely different from a real learning of those principles to be practised in actual behaviour. Real learning mostly depends on the experiences and emotional reactions of the pupils. A proper attitude and orientation must be brought about. The teacher should constantly remind himself that the pupils whom he teaches today are citizens, Government officials and politicians of tomorrow. As citizens, they have to believe in and not simply know the democratic methods and ideals. As Government officials, they have to learn the spirit of service and justice in administration. As political leaders, they must have broad sympathies, scholarship and an international outlook. Learning the subject of social studies should be directed towards inculcating these qualities and characteristics of leadership. But the pupils will imbibe these qualities and characteristics only to the extent they see and feel them in the lives and behaviour of their teachers.

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"You can preach a better sermon with your life than with your lips."

—Oliver Goldsmith

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## DIVERSIFICATION OF SECONDARY EDUCATION

By

*Veda Prakasha*

ONE of the important programmes of educational reconstruction at the Secondary stage during the last four or five years has related to the conversion of a selected number of Secondary schools to Multipurpose schools. During the last two years of the First Plan, the Ministry of Education at the Centre gave assistance for the conversion of some 470 schools of which some 250 were actually started. At the rate at which schools are being converted during the Second Plan, the number of Multipurpose schools by 1961 may easily exceed the target of 1187 laid down in the Second Five-Year Plan. This programme derives its main inspiration from the diagnosis of the current educational malaise as made by the Secondary Education Commission of 1952. To quote from the Commission's Report "The unilateral scheme of studies which concentrated almost entirely on preparing students for entrance to the university, was not calculated to bring out the best either in the teacher or in the pupils. Again the failure to provide diversified courses of study made it difficult for many students to secure suitable employment at the end of the course." To remedy this state of affairs the Commission recommended that "Multipurpose schools should be established wherever possible to provide varied courses of interest to students with diverse aims, aptitudes and abilities."

The programme of diversification of the Secondary curriculum needs no

apology. It is in line with the modern trends of education in other parts of the world. The programme has aroused widespread enthusiasm in the State Education Departments. The enthusiasm has also been shared by the voluntary organisations. Each year a large number of applications are received from such organisations for the conversion of their institutions to Multipurpose institutions. The applications far exceed the resources.

However, public support and popular enthusiasm, although necessary conditions of an educational reform, may not always suffice to guarantee the projected outcomes. Unless the new curricula are invested with suitable "contents" and unless the completion of the new courses is assured to lead to attractive employment opportunities, a movement such as the one of transforming schools to Multipurpose institutions may soon develop symptoms of exhaustion and fade out prematurely. The purpose of this article is to briefly call attention to these two problems, one relating to the development of a suitable Secondary curriculum and the other, and perhaps the more crucial of the two, to the creation of suitable job opportunities for those who graduate in the new courses.

We may consider the Secondary curriculum first. The report of the Secondary Education Commission has at several places emphasised the view that for the vast majority of students the end of the Secondary stage must

function as a terminal point. In other words, the training to be imparted at this stage should be such as among other things fits them to make appropriate occupational choices. This being one of the basic aims of Secondary education, it is important to provide that the Secondary curriculum includes only the most useful subjects and is not cluttered with too many subjects of doubtful value. The apportionment of time between the general and special subjects has also to be done in a manner calculated to promote the true ends of Secondary education and to safeguard that the vocational aim is not subordinated to the so-called liberal aim. It is hardly necessary to warn against the subservience of the liberal aim to the vocational aim since there is no such danger at present; the entire Secondary tradition is much too heavily loaded against such an eventuality coming off in the near future. For many years to come the primary concern of the educational planner should be directed at controlling in the curriculum the dead weight of the so-called liberal elements.

The general subjects recommended by the Commission and as subsequently modified by the All-India Council for Secondary Education include three compulsory languages; Social Studies, which in content will at least represent the equivalent of two separate subjects if not more; General Science, again the equivalent of at least two subjects; and one compulsory craft. Besides, every pupil will be required to offer three subjects from any of the seven alternative groups namely, Humanities, Sciences, Commerce, Agriculture, Technology, Home Science and Fine Arts. To one who has any experience of working out a school timetable, there can be little doubt that this is far too ambitious a programme to work in practice. Apart from the psychological difficulty whether the equipment of an average Secondary pupil can ever prove equal to a load of this magnitude, the mere provision of so many subjects in the timetable will reduce sharply the time available for the special

subjects.

This is not the occasion to go into a detailed discussion of the different subjects. Nevertheless one does feel that there is room for pruning several subjects from the general curriculum. For instance, the number of compulsory languages in my opinion should in no case exceed two. There is also perhaps not ample justification for retaining Social Studies and craft as compulsory subjects particularly when these two subjects will have been studied by every pupil upto 14. Any practical work to be done at the post-14 stage should be such as derives its main significance from the special subjects. The only special group for which adequate provision for practical work, as part of the special curriculum, may not be feasible will be the humanities. But it should be pointed out that for many students offering this group, practical work, unless it happens to meet one of their known interests or needs, may not always have much value. Should a student offering this group need practical work of a specific nature, it should be possible to provide the same by organising suitable extra-curricular opportunities.

The question relating to the distribution of time between the general and special subjects is again of paramount importance. While the country has little first-hand experience on this issue, we would not perhaps be far wrong in suggesting that at least 50 per cent of the time during the three years of Higher Secondary education should be reserved for the special subjects. The allotment need not be uniform throughout. During the first year the special subjects may be allotted, say 40 per cent of the time; during the second year the allotment may be increased to 50 per cent of the time and during the third to about 60 per cent. This allotment is the very minimum necessary to impart any vocational bias worth the name and should under no circumstances be reduced. (One may legitimately doubt whether a distribution in which half the time is allotted to

general subjects will suffice to impart sufficient vocational competence to the learner for purposes of entering the desired occupation!). We should take courage in both hands and stoutly fight the so-called liberal tradition in working out the curricular and extra-curricular programmes for the new schools. Unless that is done, there is a danger that what has been achieved in theory may be lost in practice.

With regard to the basic issue of the relationship between the new courses and the employment opportunities, it should be stated at the outset that people by and large look upon education not as something good in itself—to use a term from G. E. Moore—but as a means to socio-economic betterment. When educational programmes—no matter to what stage they relate—meet this test, that is, promise improvement in the social and economic status of the individual, they flourish. When, on the other hand, they do not answer this condition—no matter what their other educational merits—they invariably founder. Certain foreign data would support such a generalisation. The experience of Great Britain in the reconstruction of Secondary education in the post-war period is particularly instructive. The 1944 Act of England and Wales enjoins that Secondary education should be made to accord with the age, abilities and aptitudes of pupils. Towards this end the local educational authorities have been trying to develop three different types of Secondary institutions—the Grammar, the Technical and the Modern. The underlying assumption is that children will go only to those institutions which offer courses suited to their psychological characteristics. The reform has been further justified on the ground that in course of time perfect social equality will be established as between different forms of Secondary education and that the present pressure on Grammar schools will gradually diminish. Unfortunately the hopes raised by the Act have not been answered. Neither the Modern nor the Technical school has succeeded in establishing

itself. In most cases the Modern school has either agreed to rehearse the role of the old Senior Elementary school or in a few exceptional cases, managed to partially mask its real status by offering to the brighter pupils courses generally available in Grammar schools. The difficulty in the way of the Technical schools has been that the industry still continues to give preference to the products of the Grammar schools. Meanwhile, much against expectations, the demand for Grammar school education has not only persisted but increased. The framers of the 1944 Act do not seem to have realised with sufficient clarity that so long as the Grammar school prepared students for the university and the white-collared professions, it would not meet any serious challenge to its authority from the Modern, Technical or any other type of Secondary school.

Another British fact is relevant. The Fleming Committee set up by the British Government in 1942 had made certain suggestions for increasing the association of the independent public schools with the public system of education. Unfortunately the desired association has not been achieved so far. The public schools have not found it difficult to live in a world of their own since there has been no lessening of the demand for public school education. It is difficult to see how their class character can change so long as they continue to prepare students for the most coveted positions in the British society and so long as there are parents who are willing to pay the prescribed fees.

The history of the recent reforms in the school leaving certificate examination in that country is also of relevance. The old certificate has been replaced by the General Certificate of Education which permits the students to offer any subject at any of the three levels: ordinary, advance and scholarship. At the time of introducing the reform it was hoped that many schools which on account of social pressure were pitch-forked into preparing

students for a pass at the school leaving examination in the minimum prescribed number of subjects will be freed from the incubus and that they will be able to organise their work more in harmony with the capacities of the pupils in their charge. Again the hope has not been fulfilled because the British society continues to place a premium on success in the examination in a certain minimum number of subjects. So long as the parents insist that their children be coached to meet the minimum educational requirements of old, it matters little whether the schools in theory are free to prepare students for a pass in the subjects of their choice. In practice the schools will find it difficult to depart from the set conventions.

India offers a parallel to the British situation. The Bombay Secondary Education Board, for example, offers facility for examination in as many as 63 subjects. The facilities have been available over a number of years now. But if one looks into the distribution of the subjects which have been actually offered by examinees in the past, it will be found that the vast majority of students limit their choice to 9 or 10 subjects. These are the subjects which carry the highest value for purposes of higher education and employment. So long as the value of the other subjects for employment and higher education is not clearly established, it would be idle to expect that for purely educational considerations many parents will agree to have their children offer the less popular but psychologically more congenial groupings.

In so far as the provision of the new courses in Secondary schools is concerned, we believe the majority of parents will continue to press for the science and art courses because of the established connections of these subjects with university education and the better-paid positions in society. In so far as subjects like Agriculture, Commerce, Domestic Science etc. are concerned, nothing important in the society has happened of late to indicate that completion of Secondary education in these subjects will enable children

to secure positions of high social and financial status. Since that important condition is not met, we should be prepared for a situation where parental reluctance to admit children to the new courses asserts itself again and again. The only possible exceptions might be some of the courses in Home Science and Fine Arts which despite no clear economic advantage may, for cultural reasons, prove popular with girls. Some of the courses in Technology may also enjoy a temporary popularity on account of the gratuitous assumption that these will link up with higher technical education as well, if not better, as the ordinary science course.

The Indian situation which at the moment is characterised by incredibly large disparities in income and status as between one position and another seems to admit of only two alternatives. Either the newer courses will find it extremely difficult to attract children in sufficiently large numbers to justify the expenditure incurred in introducing them, or the distinctive features of the courses will have to be sacrificed in favour of a very large common curricular denominator in order to ensure that going through a particular course will not commit the pupil to a limited occupational field and that it will still keep open to him all the opportunities of further education available to children opting for the science or the arts courses. The first concern is justified by the data reported in the two Reports of the Special Committee of the Uttar Pradesh Government presided over by the late Acharya Narendra Deva. The experience of multilateralism which has been tried out in that State for some time now suggests that children select courses not in the light of any important educational or psychological considerations but in accordance with strong parental wishes. And can there be any doubt as to the direction in which the wishes of parents normally move ?

The apprehension that the distinctive features of the new courses may have to be softened may be justified by reference to the experience of a State like West

Bengal. The State Department of Education there has, for instance, found that if the new courses in Agriculture and Technology have to take root, it is necessary to so frame the courses that the children who complete them are not in any manner handicapped in going in for those forms of higher education for which so far the ordinary science course alone has provided the necessary preparation. Unless this is done, the new courses will function under a serious disadvantage.

The fact that people seek education not as an end in itself but as a means of socio-economic mobility can create all kinds of bottlenecks in the way of reconstructing the educational system. A reform may be inspired by the most unimpeachable motives, may have established educational considerations in its favour, but may not work in practice if the necessary socio-economic postulates are not given. In a feudal, class-ridden or a strait-jacket totalitarian society this difficulty may not be there, at any rate not to the same extent; since in such organisations the freedom which people enjoy in choosing their educational and occupational careers is severely restricted. But in a democracy where people are free to exercise their will, almost any important educational programme will be stultified if it is not founded on possibilities of improving the socio-economic status of the individual.

What are the implications of such a proposition for a democracy? Does it mean that in a democratic organisation no important educational reconstruction can ever be fruitfully undertaken? This is a most important question and it is necessary to face it candidly. It would seem that for newer educational facilities to prosper, they should either lead to new occupations of high social and economic standing or—in case they lead to some of the older callings only—the economic and social status of such callings should be improved and made more attractive. In a situation characterised by great economic

and social disparities, educational courses leading to the less favoured vocational opportunities will always be at a disadvantage. To succeed in a democracy, educational planning cannot therefore, escape the obligation of supporting itself by a certain dose of socialism in the sense of socio-economic homogeneity in the occupational world. It is only when the vast economic and social disparities which divide one station from another in the present society are minimised that the pressure on certain unilateral type of courses will relax and educational diversification become both a need and a reality.

In so far as India is concerned, it is obvious that the disparities in question, particularly the economic inequalities, cannot be removed overnight by increasing the financial rewards of the occupations at the lower end of the scale. No under-developed economy can do that. The only alternative is to lower the value of the highly paid occupations and to bring them closer to the lower occupations. The suggestion is negative no doubt, but in the very nature of things the situation admits of no other solution. If the aim of national planning is to develop the country's resources in such a manner that people are voluntarily forthcoming in sufficient numbers to take up jobs in all occupational fields, and if for this purpose the inordinate desire of the masses to go in for certain liberal types of education is to be effectively curbed, the removal of the existing disparities becomes a matter of the highest importance. If democracy and freedom are not tempered with the necessary measure of socialism, it is only wishful to hope that we shall now or ever succeed in reforming the national system of education and make it a worthy instrument of national reconstruction. And why should there be any hesitation in attending to the task—whatever its complexity—now that the building up of a socialistic pattern of society has been declared as the avowed aim of all planning, public or private?



# How I Teach It

## TEACHERS' SYMPOSIUM

*In this feature we invite teachers of secondary schools to discuss the teaching of their subjects and exchange ideas about their methods of teaching, classroom practices and any other interesting experiences they may have had in or outside the classroom. In the last three series we have discussed the teaching of Social Studies, Mathematics, Science and English. In this series the discussion is on the teaching of Art. The contributors to this series are Rathin Mitra, Head of the Art Department, Doon School, Dehra Dun; Bhabani Charan Gue of the Mayo College, Ajmer; and Dinesh Shah of the New Era School, Bombay.*

### Rathin Mitra

EVERY child is an artist. Spontaneity of expression is the child's main asset. At his age he knows no inhibitions. He is full of the light of imagination and enthusiasm. How to direct and develop these gifts is the main task before the teacher of Art.

In teaching the subject to young children the first thing the teacher of Art should do is to create a congenial atmosphere in which the children feel happy and enjoy their work. Environment has a strong influence on young minds. Therefore, the classroom should be arranged and decorated in such a way as to exert the right kind of influence on their minds and induce them to work. Another important requirement of a congenial environment is a permanent art class in every school. I remember that in one of

the schools where I was teaching previously, the art class was shifted every now and then from place to place. This irritated the boys and what is more, it had an unsettling effect on their work.

In the teaching of art it is impossible to follow one hard and fast method. Art is not an exact science. In this article I will, however, suggest a few points that I think ought to be borne in mind by a teacher of Art teaching children who are just beginning to discover the fascination of colour and line.

Have you looked at the Nature's own panorama of paintings? Does the blue sky, the green of the forest, the gold of the sunset fill you with feelings of wonder and awe?

A child is intensely aware of them and his sense of appreciation is keen.

Nothing for him is dull or stale. A good teacher of Art would know that before going further, his duty at this stage is to make the child exercise his imagination as much as possible. Therefore he will select subjects which lie within his pupils' range of observation and experience. He will take advantage of the topical, local and seasonal events. He will allow the children also to suggest and paint subjects of their own choice. He will announce the subject before the actual lesson so that the children have enough time to collect and consider their ideas. At the commencement of the lesson, the teacher should give a few minutes to a brief analysis of the subject, giving the children every opportunity to express their ideas. The job of the teacher is to be with his pupils, to guide and direct them in the clear expression of the things they have observed.

Drawing, like talking, is a language. It is another way of saying what one thinks and feels by means of line, form and colour. It is like poetry. The pupil must see, feel and arrange his subject before he tries to give it its proper expression. Throughout this process the teacher should be there to give him physical and moral support to enable the child to bring out something concrete, throbbing with life, not just a galaxy of colours or a dead image.

Imaginative composition is the essence of true art but different children express themselves in different ways. Some will produce exquisite china, some masterpieces of sculpture, some will be good with hammer and chisel, some with needle and thread and some with pen and ink or brush and paint. A good teacher of art will recognise these differences and guide the children along their own path of interests and abilities.

Combined work by two or three boys on a particular subject should be encouraged. This helps them in developing their ideas and working in fellowship. Also it is my experience that group work is the best remedy for shy boys to come

out of their shells and show their initiative.

In the art section there should be some space where the reproductions of great painters' works should be hung and these should be periodically replaced by new ones. This helps the child to broaden his horizon and it gives him inspiration, new ideas and better appreciation.

It is always a stimulating change to take the boys out for out-door sketching. On these occasions the selection of the subject should be entirely left to them. Free-hand sketching from Nature gives them a wide scope for their imagination and it develops their awareness of natural surroundings.

Children are ardent collectors and if a teacher could guide them correctly in this direction, the results can be amazing. Pebbles and twigs are ordinary things that you see everywhere around you, but an imaginative child can create a world of fantasy out of them. A butterfly collection can be a veritable feast for the eyes. In fact there is nothing like using a child's hobby to kindle his imagination.

Taking children to see art exhibitions and public displays wherever possible, is an effective way of arousing and stimulating their interest in their own creative abilities. Inter-school, inter-state and international exchanges of drawings increase their understanding of the subject and give them immense encouragement to do better work,

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### Bhabani Charan Gue

**T**HHERE are no two opinions about the necessity of art education at the secondary school level, but there are many different viewpoints as to the right method of teaching the subject.

The teaching of art in schools in our country has swung between two extremes.

One extreme is to continue the old methods of formal art teaching which attempt to make every child in the class produce a picture in accordance with the pattern in the teacher's mind or which attempt to teach the finer points of line or perspective to every child or which allow him to copy from pictures. The other extreme is to give complete freedom to the child for self-expression, allowing him or her to dabble in paints and colour at will and without any guidance or interference from the art teacher. The second extreme in my opinion is definitely the better of the two, but unfortunately it is the first, the conventionalism and formalism in child art, that prevails in the majority of our schools in India. I shall not discuss here or scrutinise the existing system of art education in secondary schools in our country, rather I shall apply myself to relating "how I practice art teaching"

Art teaching in secondary schools has two aspects—art in the education of the child (pre-adolescent) and art in the education of the adolescent.

The child begins to express itself from birth. It begins with an instinctive desire which gradually grows. Child art is that self-expression which comes from the child's inner urge. Every child is something of an artist. The creative urge is present in every child. Children live in a dream world and when they draw or paint they express dreams in their creations. They paint from the depths of their feelings and express the emotions rather than their thoughts. They do not copy directly from nature but draw entirely from imagination and hence their art is symbolic and not representational. The modern art movement in my opinion including the work of many mature artists has been greatly influenced by child art which is the work of the subconscious state of the mind. It is not a literal representation of objects which they see. Hence it is sometimes difficult to understand what they want to express in their drawing.

Lack of knowledge about the child and

his mind is greatly responsible for failure to arouse love and enthusiasm among children in the right way. The teacher's role is to encourage the child and give him considerable freedom to express his ideas and experiences, imagination and fantasies freely, but at the same time he should not deny the child the benefit of his guidance. The correct attitude towards the child and his work and the importance of sympathy and understanding constitute the keypoint to success. The aim is not to produce artists among children but to foster and develop creative self-expression inherent in every child. It is through this self-expression of his imagination, visualisation and emotions that a child develops his personality, intelligence and aesthetic sense. Any imposition of adult ideas, standards or techniques at this stage therefore would destroy his creative effort and make him timid and self-conscious. I never encourage a senior boy to help or handle the work of a junior. That I consider is harmful to both because the subconscious mind of the child clashes with the conscious mind of the adolescent.

When children come to my art school I do not let them feel that I am their teacher. I am always their companion and friend. I show them good reproductions, tell them stories, draw pictures to attract their attention and so on, and thus inspire them to use the art room. I keep enough of paper, colours, brushes for them to use. Any rigidity in the matter of materials generally hampers their creative energy. When children find a homely and congenial atmosphere in the art school, they enjoy their work and feel happy. I do not teach them how to draw or paint or tell them of colour harmony and other things ; I only try to stimulate and encourage them in every possible way. I never correct or touch my pupil's pictures, neither do I believe in giving them long lectures and criticising their work. All children do not have the same ability and their works are bound to be of different standards ; some have less power of observation ; some are

shy ; some are hasty ; others are slow or may be afraid to paint lest their pictures are spoilt and so on ; but I keep my patience and try to appreciate their sincere efforts with sympathy. I devote much of my time with them in the art school studying their temperament and nature.

Environment is also important and has a strong influence on the mind of the children. It is very necessary that the art department should be well equipped with spacious rooms and enough of materials and facilities to work. We have in our art school, apart from other side rooms, three large size rooms, out of which one room I have specially kept for children's classes. I have decorated the walls of this room with children's works only and I think these works encourage and inspire them. As for the medium at this stage, I don't think crayons, (popularly known as pastels) are suitable, no matter what their quality. From my long experience I find water colours and body colours (Tempera) a more suitable media. They get more freedom with big brushes on large size papers. Small drawings on small papers are harmful to them. Tinted paper is also good for a change, more specially if they are working in Tempera. I do not follow any rigidity in the selection of colours. I generally keep large quantities of a few bright colours and hog hair brushes for large size work on tinted paper, and water colour medium for medium size work. We have both sloping desks and big flat tables which children find very convenient to work on.

I do not believe in a rigid syllabus in art, nor in a rigid time-schedule and strict discipline. Creative art cannot be taught with a rod in hand. If the art teacher can arouse their interest these children get so absorbed in work that class discipline follows as a matter of course. I keep the art school open throughout the day, including Sundays, holidays and half holidays, and boys come and use the art school at their free will and during their spare time, though smaller children have regular periods also. To sum up, I can

say from my long experience in a public school that the key to successful art teaching to children and adolescents largely depends upon the attitude of the art teacher, his love and sympathy with the young pupils, his love for children's art, his observation of the nature and temperament of children and his capacity to create a proper atmosphere. Once you establish a good tradition in the art school, it continues and the standard goes higher as the pupils gain experience.

Teaching art to an adolescent needs different handling and tact. As children grow, they cannot be treated as children nor as adults. At this stage they need guidance of a different sort because they now become conscious and tend towards mature work and critical thinking. This is a difficult stage and wrong handling on the part of the teacher will have an adverse effect on the pupil's approach to the subject. At this stage I teach them techniques of different media, outdoor sketching, drawing and perspective, the history of art etc. Each individual has to be handled properly and separately. Patience on the part of both pupil and teacher is vitally important. And whatever lessons I impart at this stage, I give them freedom to express themselves and allow them to grow in the environment.

#### *The Role of Craft*

I am confident that education is not complete without some knowledge and handling of crafts. I always encourage my pupils to do some craft work also along with drawing and painting. We have a wide range of choice in crafts, among others lino cuts, book-binding, clay modelling, sculpture, leather crafts, carving, including workshop practice in metal and wood. Our workshop is well equipped and boys enjoy working there. The knowledge of crafts helps to build confidence and skill. It is a welcome change too.

An exhibition is another feature which inspires a child, specially the adolescent. I hold periodical exhibitions in our spacious art school to acquaint them with

the works of other creative artists, as otherwise there is a real danger of too much influence of their teacher, which though helpful and natural to a certain extent, is to be discouraged. On several occasions I invite artists, sculptors or cartoonists to spend a few days with us in our art school which proves very interesting and inspiring. We have a flourishing art society for the senior boys, run by them, and its function is to hold periodical lectures, exhibitions, outdoor sketching etc.

Finally, I believe that art in secondary schools should be taught as far as possible as an extra-curricular activity and not as a subject of examination. I have come to this conclusion from my own experience that boys develop their knowledge and aesthetic sense more if they take art as an extra-curricular and spare time activity, since they have more freedom to paint, choose their own medium without being bound to a rigid syllabus for passing in the examination. My best pupils are those who have taken either Sanskrit or Science and worked in the art school in their spare time.

\* \* \*

### Dinesh Shah

I believe that the first principle the teacher of Art should follow in the teaching of his subject is to give complete freedom of expression to the child. To me child art means an intense form of free and spontaneous self-expression of feeling and experience of a child. And while the child is engaged in drawing or painting, there should be no interference from the teacher for, in such spontaneous activity, there is a release of feeling, development of imagination and an exercise of skill that will be hampered if the child is checked too often by the teacher. Therefore, whatever suggestions or guidance the teacher has to give should be given at the beginning of the class.

The four characteristics of a piece of

art are form, rhythm, harmony and balance. It is the duty of the teacher of Art to create in the child an awareness of the beauty of things, or in other words to create in him an 'art sense'. Secondly, it is the teacher's duty to develop the child's artistic talent in whatever measure he has it, through various ways. One of the most effective methods for this purpose is the correlation method followed by Art teachers of this school, i.e. the children are asked to read a poem or a passage from their book which gives them a word picture of an object. After reading they are asked to translate this word picture in line and colour.

Another mode of drawing very much loved by the children is that of long scroll pictures. These scrolls are of black and brown paper, each about 20 to 30 feet long. These scroll paintings are prepared by children working in a group and are very useful for decorating the classrooms. Most of these scroll paintings depict a village scene or tell a story in a series of pictures.

Once a term we have a Marathon session in painting and clay modelling. The session lasts three to four hours. In this session each child is expected to do a complete picture or make a complete model out of clay. Nearly 80 to 90 children take part in this competition. The work done by the pupils is put up for display in the school and the first three are selected for the award of merit certificates.

Last year we took our students for a visit to the Ellora, Ajanta and Elephanta caves. The idea was to give them a first hand experience of seeing the famous art temples and an opportunity for free-hand sketching. But the sketching was not going to be a haphazard affair. Before the party left, there was a pre-preparation class in which the teachers gave the students some background material on the history of the place and the type of art in sculpture for which the caves are known. A group of Art teachers also accompanied the students.

## SECONDARY EDUCATION

After they returned, the students' work was displayed for the benefit of the whole school.

Class exhibitions are another regular feature of our school. During the year each class organises its own exhibition and at the end of the year the school holds an annual exhibition of the best pictures of different classes. The exhibition is open to the parents of the children and other visitors.

Finally, our school has an Art Club called 'Kala Sangam' which enrols only those students who have a special gift for art. This Club organises many activities calculated to promote and develop the

artistic abilities of children. In fact its two main objects are - art appreciation and art decoration. It is the responsibility of this group to decorate the school when there is some occasion to celebrate and help in all the dramatic performances of the school. The Club organises excursions for landscape painting and free-hand drawing. Its members meet well-known local artists to see and discuss their work with them. One important activity of this Club deserving special mention is the competition it holds every year for preparing greeting cards for festivals at Diwali, Christmas etc. The greeting cards selected for use are printed and sold. This gives the child artists immense encouragement in their work.

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Genuine beauty becomes more beautiful the closer we get to it, the longer we stay with it.

—Hans Margolius

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# ORGANISATION AND ADMINISTRATION OF A SCHOOL GUIDANCE PROGRAMME

(A Working Paper for the use of Heads of High and Higher Secondary Schools)\*

By Baquer Mehdi

**I**N any scheme of a school guidance programme, the one person who is most important to its success is the Headmaster because he occupies the key position in the school. On his initiative and enthusiasm depend the implementation, successful working and the growth of the guidance programme in a school. He has to assume the role of a leader. Staff participation in and pupil-parent appreciation of guidance services depend entirely on the kind of leadership provided by the Headmaster.

## I. Some basic concepts about guidance for the consideration of the Headmaster

- (i) Guidance in its broadest sense is synonymous with the new concept of education. It includes within its scope all the services that may be provided for the child directly or indirectly in the home-school-near neighbourhood situations of life that will contribute to his balanced and wholesome growth towards maturity and social competence.
- (ii) Guidance presupposes recognition of individual needs. It has meaning and significance to the pupil to the extent it is individualised.
- (iii) Guidance aims at helping each individual to understand his interests, aptitudes, abilities, limitations, opportunities, problems and needs and, in the light of this knowledge, to make wise decisions for himself that would lead to better adjustment and a more effective life.
- (iv) Guidance is thus a continuous and a dynamic process and is concerned with the whole individual.
- (v) Guidance is inextricably linked

with the total school programme. It is not an adjunct to the school programme but an integral part of it, and it must be recognized as such.

- (vi) Guidance needs the cooperation of the whole staff.

## II. Three main forms of guidance need to be recognized

### (i) Adjustment

The aim is to help each individual to adjust himself in academic, personal, vocational or avocational problem-situations. Professional, individualised aid is needed in making immediate and suitable adjustment at problem-points.

### (ii) Orientational

The aim is to orient each child towards life objectives "in problems of career planning, educational programming and direction toward long-term personal aims and values." Awareness of the need to plan, together with the awareness of the complexity of the world of work is an essential pre-requisite of going through school and preparing for after-school career.

### (iii) Developmental

The aim is to improve personal effectiveness and power of self-direction through a better realisation of one's own capacities and limitations, and an understanding of the problems of life that one has to face.

All the three forms of guidance mentioned above are inextricably linked

\*If heads of schools have any observations or comments to make on this paper, they are requested to address them to the author of this Paper at the Central Bureau of Educational and Vocational Guidance, 33 Probyn Road, Delhi.

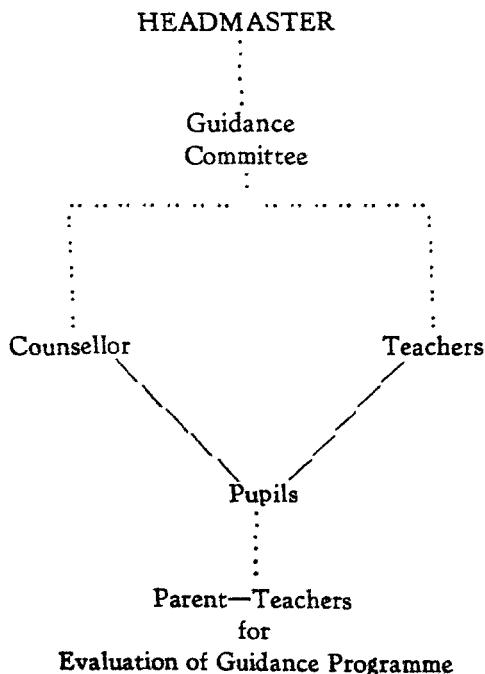
together and are directed to one and the same end which is child's growth and development on healthy lines.

### III. Essentials of a guidance programme

- (i) A trained teacher-counsellor or a trained full-time counsellor on the staff list.
- (ii) An adequate system of pupil assessment and recording pupil data.
- (iii) Library resources and materials.
- (iv) Room for the counsellor to hold counselling interviews and store necessary tools and materials for guidance.
- (v) School guidance programme to include provision for filling in pupils' cumulative record card by teachers. Some periods to be allowed to teachers for filling in pupils' cumulative record cards.

### IV. Organising guidance for the school

A Schematic Representation.



### V. After-school guidance

Youth Employment and Counselling.

### VI. Activating the guidance programme

#### Step 1

**Participation of staff members in developing the school's guidance programme.**

The following factors need to be introduced :

- (a) A simple but adequate system of recording pupil data. Cumulative record card where information about each pupil has to be entered in a systematic way is a pre-requisite of a successful school guidance programme. All members of the staff need to assist in observing, testing and recording pupil data, each contributing his own share to a complete inventory of the child.

All teachers should be encouraged to maintain a notebook on which they could note down their observations and judgments about each child whom they see during school hours and after. While filling in the cumulative record card such observations and judgments may prove very helpful.

- (b) Co-curricular and classroom activities presented in the form of a series of learning experiences to help children explore their interests and develop their capacities at each stage of growth. Again the assistance of the whole school staff is required.

#### (c) Orientation programme

- (A) *Class talks to pupils* : (Class talks supplement the instructional part of "schooling").

- (i) To develop in them right attitudes towards education in general and what they are learning in parti-

cular. Every pupil should be enabled to look at Secondary schooling as liberal education for all, education for employment for many and education for leadership for the few.

- (ii) To explain to them the nature and content of the school curriculum.
- (iii) To develop in them a sense of responsibility towards themselves and to train them for self-assessment and self-direction.
- (iv) To reveal to pupils the intimate relationship which exists between what they are learning at school and the work they would be doing after they have finished their studies.
- (v) To impress upon them the need for planning the future long before the crucial decision has to be taken.
- (vi) To illustrate to them the advantages of planning and the disadvantages of an unplanned scheme of work.
- (vii) To create in them the right attitude to work.
- (viii) To give them and help them to gather such occupational information as would make for more effective decisions regarding their life-work.

**(B) Visits to work-places and industries :**

To give pupils first-hand information and realistic appraisal regarding the world of work.

**(C) Talks by experts from various fields of work :**

These would improve pupils' knowledge of the world of work and spur them on to know more about that, particularly those aspects which demand high skill and analytical ability.

**(D) Using other media of orientation guidance and of information**

Books, career-pamphlets, filmstrips, posters, charts, etc.

**Step 2**

**Educating parents for guidance**

As far as possible parents must be acquainted with the aims of curricular planning for their children. They should have full information available to them regarding the field of subject-choices and the vocational implications of the courses in school before they are asked to choose for their children.

Meeting parents in conferences (at least once) may be of immense help in this regard. Needless to say that the Headmaster must be present at such conferences and explain to the parents the purpose of the courses at the Higher Secondary stage.

**Step 3**

**Enlisting cooperation of the school staff in the implementation of guidance programme**

A school committee for guidance should be set up for this purpose. The Headmaster should be the administrative head and the teacher-counsellor or counsellor should be the advisory head of the committee.

Periodical meetings of the committee should be held to thrash out problems requiring ready solution, plan guidance activities and assess the work already done.

**Step 4**

**Arranging specific programme of guidance in school**

(i) Curricular guidance to help pupils choose a course of study for themselves at the "delta" stage (class VIII) which

forms the end of the Junior High school stage. The success of this specific programme of guidance would depend upon how the foregoing steps have been planned and carried out.

(ii) *Vocational guidance at the school-leaving stage* to help pupils make wise decisions regarding what they should or can do after leaving school. Contacts between the school staff and the Headmaster with the prospective employers, representatives of community-agencies in the administrative, social welfare and labour-education fields and other interested persons is very necessary.

It should be stressed here that the two specific guidance programmes mentioned above require for their efficient functioning and ultimate success an organized programme of guidance—directed activities in classes VI and VII and also IX and X.

The aim is, as has been mentioned above, to help and encourage pupils to develop talents, widen the range of their interests and look for new opportunities of learning and acquiring vocational experiences.

A constructive programme of hobbies-cum-recreation activities to suit the 'average' child is the crux of the school guidance programme.

#### Step 5

#### Helping teachers to become increasingly efficient in guidance work

- (i) By providing them with up-to-date guidance literature.
- (ii) By providing them special facilities to acquaint themselves with the basic purposes and functions of the guidance programme. Extension courses in guidance organized by various Extension Services are useful in this connection.

VII. In conclusion it is useful to mention that since the functions of guidance are not identical in all schools, each school system must build its objectives and its organisation in accordance with the available facilities and the needs of pupils.

Needless to say that guidance cannot be developed without adding to the cost ; thus some budgetary provision for it is inevitable, and the school must be ready for it.

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'The first thing education teaches you is to walk alone'.—Trader Hora

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# From Our School Notebook

We publish below accounts of individual projects and activities undertaken by various schools. Contributions (which should be typed) for this feature are invited. These should be addressed to the Editor, "Secondary Education," Ministry of Education, New Delhi.

## I

### **How to Increase the General Knowledge of the Child By Daisy Maduram, Teacher, Queen Mary's School, Delhi.**

THE modern system of education lays great stress on increasing the general knowledge of the school-going child. The new curriculum, the latest methods of teaching, various extra-curricular activities and audio-visual programmes aim at developing an all-round personality of the pupil and giving him sound general knowledge. But to our disappointment, we find the results discouraging and in some cases even depressing. Many schools are not able to develop this aspect of the child's mind. Here are a few suggestions for teachers which, I think, can help the child to develop this faculty.

The teacher should set apart about 10 minutes every morning, just before starting on her regular lesson, for current events. She should ask each child to indicate some item of the latest news. Soon she will find how anxious the children are to participate in this activity. Encourage them to find out the world news, local news, the previous day's temperature, rainfall, humidity etc. Ask them to compare their town or district with other places. Help them to understand the

caricatures given in the papers and also the serial stories etc. Discuss with them the news of the day. Soon it will be found that the child has the latest news on his finger tips.

The notice boards in the school are knowledge imparting media. If the teachers are too busy with other work, mistresses and prefects can be asked to attend to this duty. Pictures of visiting dignitaries, accounts of famous events, and the latest discoveries, cut out from newspapers and magazines can go on one board. Another can be utilized exclusively for sports events. Still another can be profitably used for charts and posters sent by the Department of Education, latest maps, statistics, posters of UNO, UNESCO, Red Cross Society, World Health Organisation, Human Rights etc. Have these boards in a place where the whole school can look at them. Display the charts in an attractive manner. Now and then ask the pupils in the class if they have seen the notice boards or not.

A few black-boards placed in vantage positions can be of the utmost value. Have one for writing the thought for the week, which can be a quotation from some famous person, whose name should also be put down. The children will read it as they walk up and down the corridor and memorise it unconsciously. It will help in their moral and intellectual

development. Another black-board can be used for putting down the most important news of the day. A third one can serve to increase the vocabulary of the child. Write down ten words every week, for example all beginning with 'ex' like 'exhilaration' or words which all have the same meaning or words which sound alike but have different spellings and meanings. Change them every week without fail. Put an intelligent and responsible girl with a good hand-writing in charge of each of these black-boards. Of course, the teacher should keep an eye on all that is written.

An excursion arranged during or outside school hours can be a most impressive outdoor lesson. The cleverest teacher with all her powers of exposition, cannot fully explain to the children what a dam is, unless they see one, or what a sea is, unless they behold one or what the Taj Mahal is, unless they visit it. The exciting experience had in company of their friends, leaves a lasting impression on their minds and they can freely discourse with authority on the place visited for the rest of their lives. Excursions widen one's knowledge in many directions. Money spent on an educational tour is a wise investment indeed.

It is the custom in some schools to have a general assembly for one period once a week and each staff member speaks by turn on subjects like, "The Plastic Age", "The Life of Madame Curie", "The Gold Mines of India", "Shantiniketan" etc. No doubt, the staff member concerned will have to do a lot of preparation and present facts in a condensed form with a few jokes and anecdotes put in here and there, so that the pupils listen with attention. Serious talks do not appeal to the pupils. Make them interesting and mirth-provoking. In some schools it is a daily affair for about 20 minutes every morning after prayer when each subject teacher talks on her subject. A science teacher, for example, may have her turn every Wednesday and she will choose topics not from the

regular course but something like "Thomas Alva Edison", "Tatanagar", "Charles Darwin", "The Leaning Tower of Pisa" etc.

These lectures are so greatly enjoyed by the pupils that it is worthwhile for the teachers to take this extra trouble to present them attractively.

Dramatising is another factor which adds a great deal to one's general knowledge. While acting in a drama, a child memorises his part and this he will remember for the rest of his life. He learns about costumes, stage management, acting etc. The spectators get the visual impression of a famous story, which cannot be erased. Lives of great people, thus dramatised, will serve to add to one's general knowledge.

The house system, run in several schools is very valuable to the child. There are usually four houses and the children are placed in them, irrespective of their classes. They have house badges to distinguish themselves. The houses meet once a week or once a fortnight on Saturday afternoons. All inter-house activities, both cultural and educational, serve to add to the child's knowledge. Recitation competitions, story telling competitions, singing and dancing competitions are greatly liked by the children. Have inter-house exhibitions like "Flower Shows", "Hobby Exhibitions", "Knitting Exhibitions", "Cooking Exhibitions", etc. and have outsiders to come and judge. These activities offer so much enjoyment in addition to the knowledge imparted.

It will be a wonderful idea if the school could invite outsiders to speak to them. For example, when the UNESCO Conference was held in Delhi, delegates from all over the world came to participate in it. If some of the delegates were invited to speak to school children about schools in their country, how enlightening it would have been for the children.

Taking the children to educational films is another important way of increasing

their knowledge. It is something which every child enjoys. Things are better explained in films and children go back home with lasting impressions. Topics like, "The Eskimo", "The Animals of the Jungle", "The Ascent of the Everest", "The Panama Canal" etc., could be best explained through films, as the chances of the children visiting some of these places are remote. Once a fortnight or once a month children must have the chance of seeing these films.

Inter-school General Knowledge Tests will be a great incentive to learn. The United Schools Organisation conducts an All-India General Knowledge Test for various age groups which should be attempted by every pupil. Also, a test to be conducted in the school itself, once a term, is advisable.

No opportunity of visiting other schools should be missed. Any educational exhibition organised or any entertainment put up by one school should be seen by pupils of other schools. Apart from these, exhibitions organised by the Health Department, the Red Cross Society, the Arts and Crafts Society, UNO, UNESCO, Railways, etc. should be visited by every pupil in order to increase his general knowledge. Meeting pupils of other schools, seeing their activities and seeing models of various things are useful.

The last but not the least suggestion for imparting general knowledge is the library. It is true that many schools cannot boast of big libraries. But any school could surely have a few cupboards put in the verandah with some useful books. A long table with a few benches on either side, with one or two newspapers and a few childrens' magazines are most useful. There are some very interesting children's books in Indian languages and also magazines. The "Treasure Chest" which is one of the cheapest and the best childrens' magazine is published in many languages, and could be easily procured. There are many others like "Children's Digest", "Jack and Jill", "Illustrated Weekly" etc., which a school should buy from the pupils' fund and keep them out

for reading. Magazines and books kept under lock and key are useless and cannot contribute anything to the development of the child's mind. The 'open shelf system' in the library is very desirable and a margin for losses should be allowed in each year's budget. Every school should be able to maintain this standard with the pupils' fund.

The teachers' library should not be neglected. There should be a reference library in the staff room itself, so that the teachers do not waste time going up and down searching for information. A complete set of "Book of Knowledge" biographies, dictionaries, Psychology books, books on the latest methods of teaching should be there. Apart from books there should be a whole lot of magazines, Indian and foreign, for teachers to read. It is up to the teachers to use these profitably for widening the knowledge of the children.

The suggestions given in this article do not demand a huge hall or a large sum of money. Most of the activities could be paid for by the children from the pupils' fund. But these have to be planned well to achieve our objectives.

## II

**Learning to Spell** By Hyder Ali Shakir, Assistant Master, Government Multipurpose High School, Akola.

IT is a common complaint with teachers these days that students have become indifferent as far as the correct spelling of words is concerned. And it is a fact that once students receive their composition notebooks they pay little attention to the instructions given by teachers about the spelling of words. The result is that they make the same spelling mistakes again and again to the utter despair of their teachers. The teacher wonders what he should do to form proper spelling habits in his students. Writing a mis-spelt word for ten times or twenty times serves no purpose at all. On the contrary this sort of practice kills the pupil's interest and he does it half-

heartedly without paying any attention to its utility.

In higher classes the teachers are prone to shift the blame for such mistakes on the middle school teachers. But this is really not so. The trouble lies with the teacher's teaching methods at nearly every stage of the child's education. Therefore, our immediate concern is to see what we can do to do away with the wrong habits the boys have already formed.

The forming of proper spelling habits can make a good problem for a project. Needless to say, the execution of a project requires ingenious planning on the part of the teacher who must draw on his experiences from different sources.

My experiment with the project method in motivating the boys to solve this problem themselves proved to be a great success, and I found that the objectives set by me were fulfilled to a great extent.

### **Project**

The first step in the project was to collect words and group them under different heads. For instance, our groupings consisted of i) the collection of words rhyming with each other and having the same spelling (example—treasure and pleasure, creature and feature, aggressive and possessive, core and more, book and look, door and floor, light and sight, electricity and publicity, shower and tower, catching and matching etc.), ii) the collection of words with the same prefixes and suffixes (example—regain and remain, examination and realization, procurable and understandable, visible and negligible, troublesome and irksome etc.) and iii) the collection of words with irregular spelling sequence (example—psychology, psalm, colleague, quarrel, corps, fruit etc.)

### **Objectives**

Through this activity I wanted to impress upon my students that a) generally the words rhyming with each other are adapted to the general rule of

having the same spelling sequence; b) the words formed with different prefixes and suffixes change a little as far as their original spelling is concerned; c) the words having irregular spelling sequence present no difficulty in any way if mastered properly and methodically; d) the last letter of the verbs ending with a consonant is doubled if their tense is changed and 'ed' is added. Example—plan...planned; stop...stopped.

### **Discussion**

At this stage proper motivation is necessary and the discussion should be guided in such a way that the boys themselves come forward with their problem and feel that they should try to solve it as urgently as possible. This can be done through suitable questions. A brief summary of the questionnaire which I gave to the boys runs as follows —

- (1) Do you feel that the spelling of English words is difficult for us ? If so, what are the difficulties ?
- (2) Does it help you to write the same word ten or twenty times over ? Is it a pleasant experience for you to do so ?
- (3) Would you like to try some new experiment ?
- (4) What is your immediate problem ?
- (5) What can you do to solve it ?

I divided my class into three groups and each group was entrusted with the collection of words belonging to each category as mentioned above. On the group basis I gave them spelling games which excited them and each pupil put in his best individual effort. I called this game the "Spelling Cricket." Each student also prepared charts of words shown under different categories. Finally we held an exhibition of these charts in our school.

I conducted the evaluation of the project by means of a written test in which I employed the following media :

- (1) To complete words with omitted letters.
- (2) To form suitable words from given letters,

- (3) To correct mis-spelt words.
- (4) Solving a spelling quiz.
- (5) To form words beginning with specific "letter clues" like ad— advice or adventure etc.

### III

#### **Our House Functions** By S.L. Ahluwalia, Modern School, New Delhi.

IT is a common characteristic of all progressive schools in India and elsewhere that they provide facilities of various kinds calculated to enhance and motivate the academic and socio-cultural development of the students. One of the most important techniques followed in a majority of such schools to stimulate a sense of competition and fellowship among students is the House system. According to this system all students of a school from the lowest to the highest class are divided into groups called Houses. The main advantage of the

House system is that it decentralizes instruction and provides direction and guidance to each individual pupil. Under this system most of the activities of the school are arranged on inter-house competitive basis which is in keeping with the growing emphasis on groups rather than on individuals in the teaching of a child.

In our school we have 12 houses, each named after a national leader—Ashoka, Akbar, Pratap, Shivaji, Ranjit, Tagore, Subhash, Tilak, Lajpat, Gandhi, Patel and Nehru. It is perhaps a unique feature of our House system that once a year each house is required to celebrate its annual day which we call the House Day. The students of the house are allowed to invite their parents to this function. The major educational aims of a house function are:—

- (a) to stimulate healthy group rivalry in students;
- (b) to individualize social activity and to give every student a chance to find his place in his group;

'Spider' Dance  
put up by the  
Nehru House.



- (c) to develop qualities of leadership and initiative;
- (d) to tap the latent potentialities of students through varied activity;
- (e) to create an atmosphere for parent-teacher cooperation and better understanding between them.

The preparation for house functions is an elaborate affair and it is spread over the earlier part of the academic year. The house celebrations are planned weeks in advance. Rehearsals are normally held during co-curricular periods.

The entire management of a house function is taken in hand by the house members who divide themselves into different sub-committees for various assignments. For instance, one group may look after the decorations in the auditorium, another may take charge of the exhibition room and the third may look after the guests etc.

The house function provides a variety entertainment programme for about an hour and a half. This programme consists of one or two plays, a dance item (which is generally a group dance), the house song, personality parade, house report read out by the house captain, speeches by the house-master and the chief guest.

The play is a major item of this programme. Usually the students, in collaboration with the house-master, select two plays, one in Hindi and one in English, each of about half an hour's duration. Only one play is selected if it happens to be a long one. The choice of the play naturally depends on the availability of suitable talent in the house. This means that the students have to read a number of one-act plays to decide which one would suit their type of talent. Rehearsals of the plays are interesting. Occasionally, for these rehearsals some prominent members of some of the local amateur dramatic clubs are invited for guidance and direction.

The house exhibition is also a regular feature of a house function. At these exhibitions various types of learning aids like charts, models, study projects and hobby products prepared by the students are put up for display. These exhibitions



'Bhangra' (a Punjabi group dance) presented by the Nehru House

give the teachers and parents an opportunity to have an idea of the students' aptitudes and interests.

The function comes to an end with a grand buffet dinner arranged in the spacious dining hall of the school. Children's parents are invited to this dinner where they have a chance to meet their children's teachers and talk to them about their children's general progress.



A Scene from "Attache Case" staged by the Akbar House,

# FUNDAMENTALS FOR TODAY'S HIGH SCHOOLS:<sup>\*</sup>

## A Layman's Point of View

A sage friend has comforted me from time to time with the reminder that there are two things at least which everyone is convinced he can do better than the people doing them. One is to edit a newspaper or magazine, the other is to run a school.

I can testify to the widespread belief, if not the accuracy, of the first half of this statement. And from this limited public opinion poll I derive the courage, nay the eagerness, to invade your field and tell you as a layman what I think your profession should be doing.

What are the fundamentals of Secondary school education as seen by a non-professional, profoundly dedicated to the purposes of education yet without formal training as a teacher or educational administrator?

In this situation I think back to an editor I once had who never seemed to know what he did want. He knew very well, however, what he didn't want; I may be a little in that position myself just now.

So, permit me first to set down a few of the things I don't want—if only to help identify what I do.

Speaking personally, I do not want to be identified with that clamorous clique of critics who pick up one particular in a school situation, magnify it out of all proportion to reality, move from there into vast and invidious generalizations, and wind up by blasting out at everything that is different from what they

knew as children—a thousand years ago.

Speaking parentally, I do not expect—indeed, I do not want—the schools to deprive me of my own essential responsibility for the morality of my children. And I want you, as school people, to help me by insisting that other parents bear their share of this responsibility, too.

Speaking as a citizen, I do not want schools to be subjected to the booby-trapping of men and machines whose only interest in schools is petty, personal or political advantage.

In short, what I do want is for schools and school personnel first of all to be free of distracting or degrading influences, the better to perform their mission of opening up young minds to the possibilities, the problems and the wonders of life, and inspiring them to deal intelligently with life.

I would ask this for all schools. But it is a particularly needful premise if Secondary schools are to serve fully as the bridge from first awakenings to the vast choices and responsibilities that confront our adult society.

However we manage or mismanage our structure of education, we dare not ignore the fact that for most of our young people Secondary schools are terminal in the sense of formal education.

As a society in which we proclaim the individual's dignity and worth, we must acknowledge the multiple needs and multiple goals of our educational systems.

\* This is a condensed version of the article taken from *The Educational Forum* published by Kappa Delta Pi, Ohio (U.S.A.). The author is a writer and journalist.

But merely to acknowledge this is not enough. We must fully and wisely serve this diversity in terms of both techniques and personnel.

The Comprehensive High school is frequently cited as the universal answer. I am wholly dedicated to the Comprehensive ideal not only as the broad pathway to diversity and fulfillment but as the greatest social tool of human relations we have. The Comprehensive High school, however, has not yet attained its fullest stature as an educational forum. Between the profession of goals and performance, the gap is still too great. The burden for this lies more on the education profession than anywhere else—and this is not a question of adequate support or non-support. More money may hire more teachers, but more money will not necessarily decide the issues of substance and will and creativity. I refer here to attitudes that go far beyond the particular subject-matter that teachers deal with—to what sometimes appears to be an insular and proprietary interest in narrowness.

Looking at the child as a whole person we obviously cannot confine our Secondary schools to the development of abstractive powers alone. If we did, who—in crudest terms—would do the work, and how?

Neither must we restrict our Secondary schools to the development of manipulative skills. We may very well be producing a nation of the fastest High school-trained typists and the fastest High school-trained auto drivers on earth. But what's the hurry? Isn't there need, too, to develop a mental momentum, as well?

Even in the Comprehensive High school, I think there must be less separation than now exists between the so-called academic or general courses and vocational courses. What I really want, in part, is less divisiveness in the attitudes of people teaching these courses. I have the feeling that the Comprehensive High

school, in which young people retain the freedom of choice as to their future for a few years longer than otherwise they might, is itself forcing decisions too early—and mostly by default.

The line between the so-called "practical" or applied courses and the academic or book courses is still drawn too early, too hard—and without good reason.

## II

It has always seemed to me that the primary function of schools is to develop in individuals the power to think, not necessarily the ability to imitate. Education of course is a two-way process. There is teaching and there is learning; I hardly have to tell you that one is not always directly related to the other, nor that the sum of the output is necessarily equal to the sum of the input.

Even so the ability to think is no less urgent—it may in fact be argued it is more urgent—for those whose Secondary education is their last than for those who go on to additional study.

The role of the school as a meeting place for teacher and pupil has been diluted or altered by increasing communal demands put upon it. A fair case can be made for having the schools perform all the social service functions that other social agencies fail to perform. The school as the centre of community life is a pleasant ideal, but this does not mean that during school hours the school and its personnel should become institutionalized baby sitters or youth clubs.

The social service role of the schools, if any, is entirely secondary to the educational role, and no non-educative function must be permitted to replace the essential tasks of learning.

I could be as wrong in this as I feel one schoolman was when he recently remarked that we should pay more attention to citizenship than to academic results.

His observation seemed to suggest that a choice had to be made between the two, that good study somehow was incompatible with good citizenship, or that it was better to be a placid, non-obstructive, pliant boob than to be a restless, curious, questioning and perhaps defiant student.

Of course I want the schools to promote good citizenship. The home and the community at large have a joint responsibility here, too. But no social agency, no other element of the community, not even the home, is likely able to do the job you have to do. No one else has the background, the training, the legal and moral sanction and the peculiar responsibility that school people have in teaching youngsters how to think.

This is the school's function—more obviously at Secondary level than in the earlier years which in large part are given to developing the skills of learning. School people must not lose sight that theirs is the primary function for instruction—and that this must not be given up lightly to meddlers, or to those who fear that thinking can only lead to trouble. It must not be given up lightly even to the most well-intentioned layman—myself included.

Nor would I, as a layman, foreswear my right to say that the function of instruction—in which I urge educators to take and maintain the lead—does not always seem clear to some of the very people who bear this heaviest burden of leadership. Let me explain.

Two or three weeks ago a gentleman important on the national scene declared that "our ideals and the increasing complexity of our civilization require that each individual develop his or her talents to the fullest." But in the very next breath the gentleman warned, "This country will never tolerate the nurturing of an educational elite." I am not sure what is meant by this; it all sounds a

little contradictory. Does this mean that no one should be better than any one else—even if, in developing his talents to the fullest, he is capable of doing more and better work?

### III

We talk about Secondary school as a training ground for our future citizens. How can future citizens become socially and politically and economically literate unless they are first fully literate in the use of words for the formulation of thought and idea?

And since I do not have to be concerned about the administrative difficulties which you might face, permit me to tell you what I think the other fundamentals of Secondary education should embrace.

Teach our young people, I urge you: To be excited by ideas, most particularly by ideas they find new or by new application of old ideas.

To be unawed by those with power, but to understand the sources and the uses of power.

To be unafraid of controversy, where wiser goals or better methods are at issue.

Teach them that history itself is a record of such controversy, and that even the interpretation of history may properly be as controversial as the events themselves.

Teach our young people not to be content within themselves.

I recently heard a mother describe her son's attitude toward High school. "My son," she announced proudly, "is contented." The last thing I want, as a parent, is that at these exciting and formative years, at this most expansive and wondrous stage of life, my child be contented.

Instead, let the High school pupil be curious and courageous, inquisitive and insistent, persistent and prodding, adventuresome and public-spirited—anything, I say, but contented. It is time enough when social security comes due to be contented. This side of security and contentment lies a whole lifetime of promise and enlightenment and searching and dating, and in these will the joy of achievement be found.

Your job will not be done until you help lead young people into the area of rational, critical evaluation—not only as to the usefulness of arithmetic problems and books—but of politicians and advertising slogans and easy success.

The road of creativity is a bumpy road, whether it leads to academic or vocational ends. At the Secondary level, certainly, it must be time to help young people shed their fears of the occasional bump. The smooth and easy road may simply be the fastest road to mediocrity.

If we set our sights a little higher, demand more of our pupils and stiffen their spines by exciting them more to their own unique adventure of living, we might even be able to raise the proportion of young people who are eager to go all the way to completion of Secondary schooling.

I cannot presume to tell you the techniques by which you may be able to excite young minds. I can only plead that you and your profession must do a better job than now of finding the techniques and must be daring in your own right as you weigh new learning methods against agreed purposes. Many years ago Whitehead observed that "some of the major disasters of mankind have been produced by the narrowest of men with good methodology." The methods you use and must find to achieve these ends are less important, I assure you, than the end result. But these methods are your priceless professional assets. Use them well—for if you do not, history will accept no alibis.

## IV

As a layman, I feel myself at no disadvantage in pointing out two vital areas of school administration which I consider fundamental.

The first is the matter of proper guidance from the school itself in matters involving educational aims and preparation. A few moments ago I spoke of decisions affecting students' future choices; decisions which often are made too early and just as often by default.

I had in mind largely the performance and effectiveness of counsellors.

There are ten times as many Secondary schools in your communities that have guidance counsellors as do not. This is encouraging.

But I dare to raise the question of quality of service—a question which you yourselves should be raising.

I will not generalize, but I would like to cite an incident that explains my concern for quality.

A year or two ago a young student I know was having trouble with her first year French. Some weeks after the start of her term her counsellor called her in. The consultation went something like this.

"I see you're having trouble with your French," the counsellor said.

"I am," the girl agreed, "but it's starting to come now and I'm going to make out better, I know."

"What do you want to take French for, anyway?" the counsellor demanded.

"I want it because I want to know and speak French," the girl answered, "and anyway, I need my language for college."

"College?" the counsellor asked. "What do you want to go to college for?"

## FUNDAMENTALS FOR TODAY'S HIGH SCHOOLS

"I hope some day to be a doctor," the girl replied. "I hope I can make a good college, and you'll see—I'll bring that French up. I am going to work very hard, and it'll be all right."

To all this the counsellor had only one more comment: "Why don't you take cooking instead?"

It is not even significant that the young girl already had taken her cooking course the year before.

I ask: This is counselling? This is quality?

The enthusiasm, the ambition, the hopes, the entire pattern of this girl's life conceivably could have been thwarted by this so-called counsellor. Fortunately, the girl I speak of was not content to let the decision go by default. She stayed with her course—and with her hopes. We owe no thanks to this counsellor for her contribution to Secondary education.

You, as principals, have much to do. One of the things you have to do is hold out for the best qualified personnel in all staff levels and in all services. If the choice is between bad counselling or no counselling at all, I'll take the latter.

This brings me to the second area—and by far the larger one—of school administration which I consider vital. This is the matter of leadership which the Secondary school principals have to assert.

Everyone engaged in the profession of teaching is a potential leader. Henry Adams observed that a teacher may affect eternity; he never can know where his influence will stop. But the principals, as administrators, have an extra role to play.

Principals are like the chief executive officers in business, like the presidents of great institutions and even of nations, if you will: It is the principal who sets the tone of his entire organization.

His job is far greater than keeping the records, addressing assemblies and dispensing diplomas.

It is he, most of all, who must safeguard his school's independence from those who would weaken it. It is the principal who must see that the imaginative tea-

cher not only is well-used but is protected from those who disdain ingenuity. It is the principal who must scrape down the pedagogical barnacles. It is the principal who must demonstrate that the beginning of wisdom is the wise teacher. And it is the principal who by example can make Secondary education an exciting, meaningful experience for everyone concerned—student, teacher, staff, parent too, but most of all, the student.

I think it was Oliver Wendell Holmes who noted that a mind once stretched by a new idea never returns to its original dimension. Do not be afraid to stretch minds, to urge young people to do more than is comfortable for them to do. If we are to live in a world of reason, if we are to live at all, the development of thoughtful processes is fundamental, not to justify with hindsight what already is done, but to contemplate our choices and control our deeds.

We need men and women for tomorrow with ruggedness of mind to battle conformity's cold clamp, to withstand the disgrace of being bright, to seek truths with the assurance that it is possible to be wrong without being immoral.

This cannot happen unless it happens first in our Secondary schools.

Some weeks ago one of my own children, weary perhaps of hearing so much talk around our home about schools, asked, "Daddy, what do you really want of our schools—in a few short words?"

This was not easy. But I think now I know. I want schools for my children, as for others, that offer an educational grounding to enrich not merely the passing hour but all the hours and years that come after. I want the kind of principals and teachers and teaching that will be remembered with gratitude and affection—and respect. I want the kind of instruction and inspiration to raise up our children so they can be alone with their thoughts, yet not be lonely; so that as adults they will be strong enough to confront a new thought, theirs or someone else's, without being afraid.

# Activities at the Centre

## Central Advisory Board of Education

WE give below the main recommendations of the Central Advisory Board of Education made at its 25th Annual meeting held on 6th and 7th February, 1958 (a brief report of the meeting was published in the April 1958 issue of this Journal) :

(i) The Board recommended that the profits from the produce of Basic education institutions should be given to the children in the form of midday meals, school uniforms, etc. The State Governments should devise suitable agencies for the disposal of this produce. They should also establish for this purpose close co-operation with the existing bodies like the All-India Khadi and Village Industries Commission of the Ministry of Community Development, Government Stationery Departments, etc.

(ii) The Board considered the action taken on the proposal of the Ministry of Information and Broadcasting regarding the preparation of standard versions of the Five-Year Plans for study in schools and colleges as discussed at its last meeting, and suggested that efforts should be made to prepare small textbooks on the subject.

(iii) The Board reiterated its previous recommendation that no customs duty on Audio-Visual and other educational equipment should be charged on free gifts of such material made to educational institutions.

(iv) The Board suggested that the reasons for not setting up State Boards

for Audio-Visual education and not introducing Audio-Visual education in Teachers' Training colleges should be enquired into. The Board also desired to be informed about the difficulties which some of the State Governments were experiencing in exempting educational films from the operation of the Cinematograph Act, 1952. The Board was of the view that many of the models and charts being sold in the market were not quite accurate. As such, the Central as well as State Governments should take steps to produce accurate charts, models and other Audio-Visual aids and/or get accurate material produced by private agencies.

(v) The Board resolved to invite the attention of the State Governments to the need for looking into the question of the recognition of the Diplomas and Certificates awarded by the Rural Institutes for employment in Government services.

(vi) The Board recommended that the National Fundamental Education Centre may train workers to be employed under the Scheme of Social education in urban areas.

(vii) The Board recommended that popular periodicals published by organisations of standing may be taken up under the scheme to encourage the production of literature for neo-literates in Hindi.

(viii) The Board noted with satisfaction the progress of the various schemes for the training of the handicapped in the country and suggested that facilities

## ACTIVITIES AT THE CENTRE

for such education should be increased in view of the large number of handicapped persons in the country. The Board also felt that the training of the handicapped is not of much use unless equal emphasis is placed on the employment of the trained persons. The Board recommended that hearing aids, visual aids and prosthetic appliances should be made available to persons in need of them either free or at reduced rates to enable them to make the maximum use of their residual powers. Considering the difficulties that handicapped children have to face in attending ordinary schools, the Board recommended that Model schools for handicapped children should be started as early as possible in all parts of the country.

(ix) The Board noted with regret that the scheme of loans for the construction of hostels had not been implemented during 1957-58 so far. It desired that the scheme should be implemented urgently in view of the importance of hostels for proper education.

(x) The Board felt that for the development of Secondary schools and other educational institutions, construction of additional accommodation was absolutely essential. It recommended, therefore, that as far as practicable, there should be no restrictions in this regard and that the educational buildings should be given the same high priority as is accorded to the construction of hospitals.

(xi) The Board recommended that suitable training facilities in the Training colleges should be urgently provided for the training of teachers in subjects like Technology, Agriculture, Commerce, etc.

(xii) In view of the progress that the country as a whole had to make in the field of the girls' education and in view of the fact that teachers for Primary schools could come only from the products of Secondary schools, the Board recommended that the scope of the scheme for the expansion of girls' educa-

tion should be extended to cover the Secondary level.

(xiii) The Board noted that a large number of children were not covered by any one of the four types of organisations working in the educational institutions in the field of Physical education, namely, Scouting, A.C.C., N.C.C., and National Discipline Scheme. The largest possible number of children should be brought under one or other scheme which was the cheapest and the soundest from the educational point of view. The Board felt that it was extremely desirable to assess the cost and relative benefits of A.C.C. on the one hand and Scouting and Guiding on the other. Whether the expenditure on A.C.C. in schools was commensurate with the educational benefits was a point that needed close scrutiny.

(xiv) The Board carefully considered the issues involved in the proposal of Multipurpose Training institutions and felt that such reorganisation of Training colleges in the Second Five-Year Plan period would give rise to numerous administrative and financial problems which may upset the normal functioning of these institutions. It recommended instead the expansion and improvement of the existing Secondary Training colleges with a view to providing better training facilities, refresher courses as well as higher training for teaching in diversified subjects. It also agreed to the integration of Basic Graduates' and Basic Under-Graduates' training in institutions where conditions favoured such integration.

(xv) The Board considered the proposal of the Orissa Government and endorsed the principle of giving more liberal financial assistance to the backward States for implementing educational schemes sponsored by the Government of India. Such assistance was necessary to minimise the present disparities between States and to bring them all to the same educational level as early as possible.

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(xvi) The Board noted that some universities had already recognised the diplomas given by the Post-Graduate Basic Training colleges in their States and suggested that efforts be made to persuade other universities to fall in line.

The Board approved the proposal of the Bombay Government that the National Institute of Basic Education should provide for a few places for the diploma holders of Post-Graduate Basic Training colleges to do research at the Institute. It noted, however, that the Institute had at present no power to award diplomas recognisable by the universities for higher studies or acceptable to the Governments for purposes of employment.

(xvii) The Board recommended that facilities for appearing as private candidates at M.A./M.Sc. examinations of universities should be extended to practising teachers, provided those sitting for the M.Sc. examination had undergone training in the subject concerned in a recognised institution with adequate facilities for laboratory work in one of the following three ways :

- (1) By attending a special condensed course of one year's duration to be organised at suitable university centres, to which selected teachers working in Secondary schools could be deputed for a period of one year.
- (2) By attending organised vacation courses of three months' duration for two or three years in succession.
- (3) By attending evening classes.

### Central Bureau of Educational and Vocational Guidance

#### Conference on Allocation of curricular subjects

A Working Conference on 'Allocation of curricular subjects to students passing out of standard VIII in High/Higher Secondary schools was held on 27th and 28th March 1958. The Con-

ference was convened by the Educational and Vocational Guidance Association of Delhi in collaboration with the Central Bureau. About 30 High/Higher Secondary schools participated.

Discussion centred mainly on the criteria for allocation of the subjects in the elective group to students promoted to class IX. The results of the terminal and annual examinations in standard VIII and the opinion of the teachers concerned formed the basis of allocation in most schools.

It was decided to use suitable intelligence tests and if possible, teacher-made tests in General Science and Arithmetic to supplement the examinations. The increasing use of curricular orientation talks was also recommended, besides interviews with the parents.

#### Annual meeting of the A.I.E.V.G. Association

The All-India Educational and Vocational Guidance Association (Central Office—Faculty of Education and Psychology, Baroda) held its 1958 annual meeting and conference on guidance and student personnel services at Jabalpur from 12th to 15th April, 1958. Representatives of States and private Guidance organisations, Directorates of National Employment Service, Teachers' colleges and universities participated in the conference. The delegates numbered about 60.

The work of the conference was divided into four sections : (1) guidance administration and school guidance programme planning (2) guidance and counselling aids (3) guidance personnel training and (4) guidance and student personnel work in the university/college.

The conference passed a number of resolutions. Among others, it recommended the appointment of whole-time counsellors in all Multipurpose schools, coordination of projects dealing with the preparation of guidance and coun-

## ACTIVITIES AT THE CENTRE

selling aids, and systematisation of guidance personnel training courses.

### Occupational talks for vocational orientation

The Director General of Resettlement and Employment, Ministry of Labour, has planned to prepare and print a series of occupational (class) talks for vocational orientation of the school leavers. These talks are expected to be available before the autumn break.

### Professional Training Course for Counsellors

The Central Bureau has planned to conduct a professional training course for counsellors. The course, beginning in early July 1958 will terminate in the first week of May 1959.

The course will include (1) theoretical instruction in the major fields of adolescent psychology, educational and psychological statistics, curriculum development and organisation, and procedures and principles of guidance and counselling psychology. The ancillary subjects included are education systems, employment market information, vocational education and youth employment.

Practical training and field practice form two other major courses of the course. They include preparation of analytic and descriptive tools of guidance and counselling, job analysis and preparation of occupational briefs, administration of psychological tests and interpretation of test data, giving of "class talks" and use of other audio-visual aids, counselling interview, preparation of individual and job profiles and school leaving reports.

The course is limited to 15 students only.

### The Central Research Advisory Committee

The Central Research Advisory Committee, consisting of official and non-official members, recently set up by the Ministry of Education to coordinate research activities in the field of education, held its first meeting on 15th April, 1958. The meeting decided that each of the five institutions established by the Ministry and represented on the Committee should prepare a definite schedule of research projects for the next year. The five institutions are : Central Institute of Education, Delhi ; Central Bureau of Textbook Research ; Central Bureau of Educational and Vocational Guidance ; National Institute of Fundamental Education and National Institute of Basic Education.

### Reconstruction of Secondary Education

During 1957-58 a total amount of Rs. 2.69 crores was sanctioned as Central assistance to the State Governments for their educational development programmes for the reconstruction of Secondary education. This includes an amount of Rs. 42.61 lakhs granted for the improvement of salary scales of Secondary school teachers. In addition an amount of Rs. 9.31 lakhs as first instalment of Central share was sanctioned to the various States for the introduction of 80 Agriculture and 10 Science courses in their rural Secondary schools. During 1957-58, 155 Secondary schools were converted into Multipurpose schools and 231 schools were converted into Higher Secondary schools.

### Research in problems connected with Secondary Education

The following grants were sanctioned for the promotion of research in training colleges :

1. Thiagarajar College of Preceptors, Madurai

1. An enquiry into the teaching of social studies in the schools of Madurai

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**SECONDARY EDUCATION**

<b>S. No.</b>	<b>Institution</b>	<b>Research Project</b>	<b>Amount Rs.</b>
2.	Sri Ramakrishna Mission Vidya-laya Teachers College, Coimbatore	2. A study of the socio-economic conditions of High school students in Coimbatore district	500
3.	Government Basic Constructive Training College, Lucknow	3. Determination of the allocation of time for the different crafts with fatigue and productive capacity of pupils of Classes V and VI (Ages 11 and 12) 4. A follow-up programme of technical teachers in service	2,400
4.	Visva-Bharati, Shantiniketan	5. Preparation of standardised attainment tests in different school subjects	500
5.	D.S. College for Women, Ferozepur	6. The utility of the school broadcast and the ways and means to make it more effective	2,450
6.	Gorakhpur University, Gorakhpur	7. A sample survey of mental ability in urban and rural Secondary schools of Eastern U.P.	450
7.	University of Allahabad, Allahabad	8. Causes of failure in U.P. examinations 9. Survey of the load of work on Secondary school teachers	2,285
8.	University of Madras, Madras	10. Standardisation of intelligence tests	740
9.	University of Poona, Poona	11. Visual education	620
10.	Hindu College, Moradabad	12. A comparative study of integrated and traditional methods of approach in the teaching of social studies to Class VI	600
11.	Gauhati University, Gauhati	13. Follow-up study of teachers in training	4,496

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### **English Language Teaching Institute**

An informal meeting of the members of the proposed English Language Teaching Institute, Hyderabad, was held on 19th April, 1958. The Institute is expected to start functioning from July 1958. The first course is meant for lecturers in English of the various Training colleges in the country.

### **Promotion of Gandhiji's Teachings in Schools and Colleges**

The Ministry has decided to institute a series of lectures on Gandhiji's life and teachings in the universities by eminent persons who had been closely associated with Gandhiji. The first series of lectures will be held during the current academic year.

### **Assistance to Voluntary Educational Organisations**

The following grants were sanctioned during the period under report :

<i>Name of the Institute</i>	<i>Amount Paid</i> Rs.	<i>Purpose of Grant</i>
Ramgharia Training College, Phagwara, Punjab	2,000	Establishment of Educational and Vocational Guidance Bureau
Ramakrishna Mission Ashram, Baranagore, Calcutta-36	10,000	Extension of High school building, construction of library and reading rooms, and purchase of equipment
Shri Ramakrishna Mission, Kallai, Kozhikode, Kerala State	38,000	Construction of a laboratory, library and additional class- rooms for the High school
Gujarat Research Society, Bombay	8,423	Continuation of Psychological Research Bureau.
Koshatwar High School, Pusad, Bombay State	10,000	Construction of Science laboratories
Tilak Dhari Training College, Jaunpur, Uttar Pradesh	2,000	Establishment of Educational and Vocational Guidance Centre
Prakash High School, Ahmedabad, Bombay State	3,000	Equipment for the improvement of Home Science Section
Mahbub College High School, Secunderabad, Andhra Pradesh	8,000	Construction of additional block of building
Fatima Girls Multipurpose High School, Kazipet, Andhra Pradesh	5,000	Purchase of furniture for school and books for the library
The National High School (Girls), Madras	{ 266 325	Electrification of the building for Home Science and Fine Arts sections Construction of a building for Home Science and Fine Arts sections and purchase of equipment

## SECONDARY EDUCATION

<i>Name of the Institute</i>	<i>Amount Paid Rs.</i>	<i>Purpose of Grant</i>
Hingne Sree Shikshan Samstha, Poona, Bombay State	50,000	Special grant on the occasion of the centenary of Dr. D.K. Karve
Sree Sarada Ashrama, New Alipur, Calcutta	80,000	Construction of a building for the High School and the Students' Home
Jamia Millia Islamia, New Delhi	30,000	Conversion of Higher Secon- dary School into a Multipur- pose School
Shri Ramakrishna Advaita Ashrama, Kalady, Kerala State	18,000	Construction of a building for laboratory, library and purchase of equipment

### National Youth Centre

To provide greater recreational facilities to the students, a meeting of the representatives of the Ministries of Defence, Works, Housing and Supply, C.P.W.D., and Town Planning Organisation was held to explore the possibilities of developing the 'Ridge area' near Talkatora Gardens, Delhi, into a National Youth Centre. The Town Planning Organisation has given a sketch of the proposed centre. The matter is due for discussion in another meeting of the Ministries concerned.

### Youth Hostels

The restrictions on expenditure entailing construction work have been relaxed in the case of Youth Hostels. A grant of Rs. 10,000/- was sanctioned to Bihar State Government for the construction of two Youth Hostels. During the current financial year, the State Governments are expected to chalk out and implement more proposals for constructing Youth Hostels. The Centre meets 50% of the expenditure subject to a maximum of Rs. 20,000/- for each project under the scheme.

### Students' Tours

In view of the importance of educational tours it has been decided to enhance the financial assistance for

students' tours to the extent of full third class railway/bus fare at student concession rates. The old basis of payment of the railway/bus fare was 75% under which students had to incur considerable expenditure themselves.

During the quarter under review an amount of Rs. 24,750/- was sanctioned and 31 batches of students availed themselves of this assistance.

The plan for youth welfare is being revised to extend youth activities to the non-student category of youth.

### Sports

During the period under report a Regional Coaching Camp in Cricket was held at Bangalore from 19th May, 1958 for a period of three weeks for the benefit of Teachers/Physical Instructors drawn from the educational institutions in Madras and Mysore States and from the universities of Kerala and Mysore. Thirty trainees received training in the methods and techniques of the game.

During the period, grants to the extent of 50% of the total expenditure were sanctioned to the Universities of Allahabad, Rajasthan, Annamalai, Vallabhbhai Vidyapith and Nagpur for holding coaching camps on their respective campuses with the help of Teachers/Physical Instructors trained at the Ministry's coaching camps from time to time.

**NEWS AND NOTES  
FROM  
THE ALL-INDIA COUNCIL FOR  
SECONDARY EDUCATION**

**Extension Services**

Quarterly grants amounting to Rs. 4,01,700/- were sanctioned to the Extension Services Departments of 52 Training colleges. Delhi Administration, Bombay, Kerala, Madras, Punjab, Rajasthan and Mysore have sanctioned the continuance of the Extension Services till March 1961.

**Zonal meetings of the Extension Services Departments**

The Zonal meetings of the Extension Services Departments in the five Zones were held as follows :

North-Western Zone at Chandigarh on 23rd and 24th March, 1958.

Southern Zone at Madras on 25th and 26th March, 1958.

Northern Zone at Agra on 27th and 28th March, 1958.

Western Zone at Shantiniketan on 13th and 14th April, 1958.

Central Zone at Bombay on 15th and 16th April, 1958.

At all these meetings reports of the different Extension Services Departments were read out and the programme for the year 1958-59 was discussed. Besides, a number of problems, mostly of administrative character, were considered.

The Council conducted 4-day Regional Workshops in April-May, 1958 in the five Extension Services Zones for providing training to the Co-ordinators and Technical Assistants in the use and manipulation of T.C.M. equipment. These workshops were held at Lucknow, Calcutta, Bangalore, Hyderabad, and Srinagar. The workshops were directed by the Honorary Directors of the Extension Services Departments concerned.

**Seminars and Workshops**

Two Secondary Education Workshops, each of 6 weeks' duration, started at Hyderabad and Trichur respectively on 14th April, 1958. These Workshops were organised by the United States Education Foundation in India in co-operation with the All-India Council for Secondary Education. The Council assisted the U.S.E.F.I. by deputing 4 Indian consultants and by contributing towards the boarding and lodging expenses of the participants.

The following follow-up workshops of Headmasters were organised :

<i>Name of the Institute</i>	<i>Participating States</i>
Ramakrishna Mission Boys' Home, Rahara	West Bengal and Assam
Central Pedagogical Institute, Allahabad	U.P. and Madhya Pradesh
Government Post-Graduate Basic Training College, Chandigarh	Punjab, Rajasthan, Jammu & Kashmir, and Himachal Pradesh

These workshops were meant to encourage the examination of the projects started by Headmasters of Secondary schools and were wholly financed by the Council.

The following Seminar-cum-Training courses were organised during the period under report :

(i) *Seminar-cum-Training Course in Commerce* was held at Bombay under the direction of the Principal of S.T. College, Bombay. Twenty-four teachers of the States of Bombay and Andhra Pradesh attended.

(ii) *Seminar-cum-Training Course in Home Science* was held at Coimbatore from 24th March to 30th April, 1958. States of Madras, Mysore, Andhra Pradesh and Kerala participated. Thirty-two participants attended and were awarded

certificates.

(iii) Seminar-cum-Training Course in Agriculture was held at Government Agricultural College, Ludhiana, from 24th April to 27th April, 1958. Punjab, Madhya Pradesh, Bihar, Jammu & Kashmir and Rajasthan, were the participating States.

The aim of these courses was to give short-term training in Pedagogy to untrained teachers of practical subjects in multipurpose schools. Along with this professional training, the participants were given certain reorientation lectures in the content of syllabus in their respective subjects.

#### *Work of the Evaluation Unit*

Evaluation Workshops aiming at making a study of scientific methods of educational testing and appraisal were conducted during the period under report

at Calcutta, Aligarh, Delhi, Jabalpur, Lucknow, Nagpur, Ratnagiri, Baroda, Cuttack, Warangal, Kurnool, and Turki.

#### *T.C.M. material received and distributed*

The Council received 35 cases and 66 cartons of books and 19 boxes of books and art material. These were distributed to first and second flights of Extension Services centres of various Teachers' colleges in the country.

#### *Science Clubs*

Grants amounting to Rs. 1,47,600/- were sanctioned to the various Science Clubs attached to High and Higher Secondary schools.

Grants amounting to Rs. 500/- were given to two schools for the implementation of the experimental projects.

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'The more purely intellectual aim of education should be the endeavour to make us see and imagine the world in objective manner as far as possible as it really is in itself, and not merely through the distorting medium of personal desires.'

—Bertand Russel.

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# *Around the States*

## **Andhra Pradesh**

### *Improvement of Secondary Schools*

During the quarter under review the State Government converted 9 schools into Higher Secondary schools in the Andhra Area.

Under the scheme "Improvement of Teaching in Core Subjects in Government Secondary Schools", equipment consisting of furniture, science appliances, almirahs and a number of books on Social Studies were purchased in 46 Government Secondary Schools at a cost of nearly Rs. 4,60,000. The libraries of these schools were equipped with useful books at a cost of Rs. 1,15,000/- by the end of March 1958.

### *Nationalisation of Textbooks*

The State Government has decided to nationalise textbooks. To start with, a scheme has been approved by the Government to print textbooks for primary classes (standards I to V) in Telugu medium. This scheme will be implemented from the school year 1958-59 during which Telugu Reader V will be published.

The printing of textbooks will be entrusted to the Andhra Pradesh Textbook Press, Hyderabad, which has been established with an initial capital of Rs. 17 lakhs. The press will be under the administrative control of the State Education Department.

### *Propagation of Hindi*

An amount of Rs. 94,000/- was sanctioned for equipping 211 schools with

Hindi books. A separate Education Officer (Hindi) was appointed to look after the propagation of Hindi in the State.

### *Scouting*

A sum of Rs. 1,00,000/- for buildings and Rs. 20,000/- for equipment was paid to the Bharat Scouts and Guides Association towards the construction of 3 camping centres.

## **Assam**

Assam has registered a steady progress in the field of Secondary education. Four Government High schools at Lakhimpur, Golaghat, Barpeta and Pathacharkuchi were developed into Higher Secondary schools and two High schools at Kokrajhar and Silchar into Multipurpose schools. The total number of Multipurpose schools and Higher Secondary schools in the State on 31st March, 1958 was 17 and 9 respectively.

The construction of school buildings for Multipurpose schools, Science laboratories and work-rooms for crafts was completed. Eleven High schools were taken up under the scheme of introduction of craft subjects and 13 Middle schools were provided with facilities for teaching crafts.

### *Teacher Training*

To improve the quality of teaching and to get qualified teachers, the Assam Government has taken various measures such as increasing the number of seats in Training colleges, deputing teachers for further education in post-graduate

classes of the Gauhati University, and awarding stipends to prospective teachers of Agriculture, Home Science, Fine Arts and Crafts.

The following pay scales for teachers of Multipurpose schools have been approved by the State Government in order to attract qualified persons—

**Government Multipurpose and Higher Secondary Schools :**

- (1) Teachers: Honours graduates with two or three years' Honours course : Rs. 125-7½-155-9-245-EB.-10-275 plus 20% special pay plus two advance increments as admissible to Honours graduates.
- (2) Teachers : With Post-graduate Degree (M.A., M.Sc., etc.): Rs. 175-15-250-EB.-15-340 (EB).-15-430-20-450,-with starting salary of Rs. 220/- p.m.
- (3) Headmasters : Rs. 250-20-450 (EB).-25-600/- with starting salary of Rs. 390/- p.m.

**Government Aided Multipurpose and Higher Secondary schools :**

- (1) Teachers: With two or three years Honours course : Rs. 100-5-200/- plus 20% special pay plus two advance increments as admissible to Honours graduates.
- (2) Teachers : With a Post-Graduate Degree (M.A., M.Sc., etc.) Rs. 175-7½-250-10-300/-.
- (3) Headmasters : Rs. 250 15-400/- as admissible to the Principals of Grade II colleges.

Towards this objective, that of improving the quality of teaching, the State Government organises occasionally seminars and workshops for teachers. The following seminars were organised during 1957-58 :

1. Headmasters' Seminar at Gauhati.
2. Two Ten-day Subject Teachers' Seminars—one at Gauhati on General Science and the other

3. at Jorhat on Social Studies.
3. Seminar of Hill Districts on Basic Education at Tura.
4. Secondary Education Workshop at Thalukbari.

A training course for craft instructors was introduced in the Prince of Wales Institute of Technology, Jorhat, and a science-teaching training course was organised in Cotton College, Gauhati. Both these courses included vocational and professional subjects. The teachers of Fine Arts and Home Science were trained at Shantiniketan.

A State Bureau for Educational and Vocational Guidance has been established in the office of the Director of Public Instruction.

Objective tests in History, Geography, Arithmetic and General Knowledge have been introduced in the Middle School Examination.

**Bombay**

*Secondary Teachers meet at Kudal*

A conference of Secondary teachers in Ratnagiri District was held in February last in Kudal High School, Kudal, under the auspices of the Ratnagiri District Secondary Schools' Association. The conference discussed various problems concerning Secondary Education in the District and passed a number of resolutions touching the welfare of Secondary schools, their students and teachers. The main resolutions urged the Government

- (a) to raise the maintenance grant for Secondary Schools from 30% to 50% to enable the schools to have more balanced budgets ;
- (b) to revive the payment of ancillary grants to Secondary schools to enable them to carry out improvement programmes with greater speed ;
- (c) to raise the percentage of free-ships in Secondary schools from 3 to 15 to enable a greater number

## AROUND THE STATES

- of needy and deserving students to benefit from education ;  
 (d) to improve the pay-scales and dearness allowances of Secondary teachers in accordance with the rise in the cost of living index.

The Conference further urged the Government to raise the age of retirement for Secondary teachers from 55 to 60, while letting them retain the facilities in respect of provident fund etc.

On the eve of the conference an Educational Exhibition was held in the premises of the Kudal High School. The exhibition was divided into the following Sections :

1. Experiments in Natural Sciences performed by the pupils of the School.
2. Maps and charts drawn by the pupils.
3. Art and craft articles put up by various Secondary schools of the district.
4. "Atoms for Peace" prepared by a Science teacher.
5. Experiments in Home Science by the pupils.

The exhibition was visited by thousands of school children from rural and urban areas as well as teachers and delegates attending the Conference.

### *Small Savings Drive*

The Headmasters' Association, Kolhapur, organised a Small Savings Drive programme on March 12 and 13, 1958. Selected pupils of Secondary schools in the district sold Small Savings Certificates valued at Rs. 12,530.

### **Delhi**

In order to meet the rush of admissions in Secondary schools, the Directorate of Education opened/upgraded 32 schools on 1st April, 1958 as detailed below—

New Higher Secondary schools opened ..	15
Middle/Senior Basic schools raised to Higher Secondary standard ..	8
New Middle schools opened ..	4
Junior Basic schools raised to Senior Basic standard ..	5
Total ...	32

These schools would cater to the needs of about 5,720 children.

As the demand for admission is still persisting in some of the areas of Delhi, it is proposed to open/upgrade another 16 Secondary schools with effect from 15th July, 1958 when the schools in Delhi re-open after the summer vacation. The details are as under :

New Higher Secondary schools ..	5
Middle/Senior Basic raised to Higher Secondary standard ..	9
New Middle schools ..	2
Total ...	16

With the opening/upgrading of these schools the admission problem in Delhi will be solved to a very great extent. In addition to the above, 10 Government High schools (six for boys and four for girls) were raised to Higher Secondary standard on 1st April, 1958. This was done in order to bring uniformity in the pattern of Secondary education, as recommended by the Secondary Education Commission.

With the setting up of the Corporation in Delhi, all the Primary, Junior Basic, Senior Basic and Middle schools have been transferred to that body, except a few Middle schools which being part of High/Higher secondary schools are outside the jurisdiction of the Corporation.

Twenty-eight heads of Government

and Aided High and Higher Secondary schools met at Dalhousie for participating in the Education Workshop organised by the Extension Services Department of the Central Institute of Education, Delhi. The Education Workshop was held from 24th May, 1958 to 12th June, 1958.

The syllabus for the Multipurpose Higher Secondary schools is under the consideration of the Board of Higher Secondary Education. As soon as the syllabus is finalised a few of the Higher Secondary schools will be converted into Multipurpose schools.

### Kerala

#### *Reorganisation of Secondary Education*

The course of studies in Secondary schools has been reorganised on the pattern recommended by the Secondary Education Commission. Electives have been introduced in Standard X. The electives fall under seven groups viz. Humanities, Science, Technical, Commercial, Agriculture, Fine Arts and Home Science. The schools are being converted into Higher Secondary schools according to a phased programme.

For the efficient implementation of schemes of Technical Education, a separate Department under the Director for Technical Education was created.

The post of a Director of Textbooks and Examinations was also created for efficient administration of the work relating to the conduct of public examinations and printing and publication of the textbooks.

Hindi was introduced as a compulsory subject in all schools in the Malabar area.

A Music Academy was opened at Palghat. A dance section was started in the S.S.T. Academy, Trivandrum.

### Orissa

#### *Teaching of English and Science in Secondary Schools*

During the quarter under review, an Expert in the teaching of English appoint-

ed by the Board of Secondary Education, Orissa, conducted six English Teachers' Refresher Courses in which 103 teachers from the High and Middle schools of the State participated. The Expert also contacted the English teachers of some selected schools and suggested measures for raising the standard of teaching English in their schools.

An Expert in Science appointed by the Board of Secondary Education, Orissa, visited four High schools during the period under report. He gave demonstrations and attended lessons given by Science teachers of the school. On the basis of his observations, he suggested various improvements in the methods of teaching Science in schools.

### *Courses of Studies*

The Courses of Studies for the High School Certificate Examination of 1962 and Higher Secondary Schools Certificate Examination of 1963 were framed by the different syllabus Committees of the Board of Secondary Education, Orissa.

### *Books for School Libraries*

The Board has also prepared a list of approved books for the libraries of High schools and Higher Secondary schools in the State.

### Uttar Pradesh

#### *A Course in the Teaching of English*

The two Extension Services Departments working in Lucknow jointly sponsored a ten-day British Council course in the "Teaching of English as a Foreign Language". Thirty-five teachers of English in Secondary schools (both boys' and girls') joined the course. Among the observers were lecturers of Training colleges and heads of institutions. The course utilised the resource personnel available in Lucknow. An expert provided by the British Council directed the Course. The local inspectorate pro-

vided the necessary administrative help. The programme of the course was devised to mix hard instructional work with delightful items like films, recorded poetry and drama. The new method of teaching English provided the structural approach to a new understanding of the language and gave it a new perspective as well as increased vocabulary and greater effectiveness in expression.

The course included lessons on general linguistics and English language, speech therapy and spoken English, on changing a teaching situation into a learning situation in the classroom, on the use of audio-visual aids and methods of intensive teaching.

The experts conducted the course during the day and in the evenings participated in conferences which were organised for different groups, viz. teachers under training, in-service teachers, parents and others interested in the teaching of English. Five such conferences were held to throw light on the new approach from various angles.

At the end of the course, the teachers of English formed an association to keep in touch with one another on the follow-up work.

#### *Students' Scientific Research Competition*

The State Education Department organized a Students' Scientific Research Competition with the object of encouraging the students to take greater interest in experimental science as a hobby. Seven prizes of Rs. 100/- each to students of Higher Secondary schools were offered for outstanding work in any branch of science, both theoretical and practical, e.g. working models of modern scientific inventions, papers on scientific topics involving some original thinking, new ideas regarding reproduction of improvised substitutes for articles that are scarce and expensive, popular presentation of highly technical subjects and essays disseminating general knowledge regarding articles of every day use, etc. A large variety of

topics were discussed by the competitors and a number of good models were displayed.

The Dean, Faculty of Science, Lucknow University, and Heads of Departments of Science, judged the entries and decided about the awards. Science teachers, parents, educational administrators and journalists took keen interest in the competition.

The competition was expected to give an impetus to the Youth Science Club movement in the State and inspire greater interest among students in the field of pure and applied sciences.

#### *West Bengal*

#### *Reorganisation of Secondary Education*

The reorganisation of Secondary Education in the State has followed the broad pattern suggested in the Secondary Education Commission Report and recommended for acceptance by the All-India Council for Secondary Education and the Union Ministry of Education.

The State Government has finally agreed that the Primary stage will be of 5 years' duration and the Secondary stage of 6 years' duration from class VI to XI. The schools of the State are being reorganised in one of the following patterns :

- (a) Junior Basic schools consisting of classes I to V.
- (b) High schools consisting of classes I to XI.
- (c) High schools consisting of classes VI to XI.
- (d) High Schools consisting of classes IX to XI.

The new types of diversified courses are being introduced in class IX of reorganised schools. The Courses offered in the reorganised schools are :

- (i) Humanities, (ii) Science, (iii) Technical, (iv) Commerce, (v) Agriculture, (vi) Home Science and (vii) Fine Arts.

The study of at least one craft has been made compulsory in the reorganised schools. At the end of 1957-58 the number of upgraded schools in the State was 283 with diversified courses and 99 with Humanities only. The existing Middle schools are also being converted into Senior Basic schools gradually and new Senior Basic Schools are being established. The number of Senior Basic schools at the end of 1957-58 was 60.

During 1957-58, 14 High schools received grants at the rate of Rs. 50,000/- each to improve facilities for Science teaching and 35 more schools received grants at the rate of Rs. 15,000/- each under the head "Improvement of teaching in other subjects".

During the same year 106 libraries were assisted with grants. Also, 26 Area Schools were sanctioned grants to improve the housing conditions of their

students and another 21 Schools were given grants to improve the housing conditions of their teachers.

The pay-scales of Secondary school teachers have been substantially improved in the State. Further the State Government has sanctioned two extra teachers per course for each of the upgraded schools and also a Hindi teacher and a Craft teacher for each school.

A scheme for giving free education to all girls reading in Classes V to VIII in rural areas has been prepared. The Government proposes to implement the scheme with immediate effect.

A scheme for bringing all the Junior High schools of the State under the per-view of the deficit system of grants is under the active consideration of the State Government.

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"Educational systems are built for a time and not for all times. There are no changeless ways of educating human nature. A curriculum which had vitality in the Vedic period or the Renaissance cannot continue unaltered in the 20th century. Realising that the vision of free man in a free society is a living faith and inspiring guide of democratic institutions, we must move towards the goal adapting wisely and well to changing conditions."

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—The University Education Commission Report

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# Window on the World

## News from Unesco and Abroad

**Ann Arbor High School, Ann Arbor Michigan** By Dr. B. Kuppuswamy of Maharaja's College, Mysore. (*The writer has recently returned to India after three months' study tour in the United States. Here he gives an account of his visit to Ann Arbor High School which he describes as a 'multipurpose' school.*)

SINCE the end of the second world war there has been rapid expansion in enrolment at all stages of education in the United States. There is a great similarity between the present situation in American education and in Indian education. In several parts of the United States we can see big buildings being constructed for education at the elementary, junior high school and senior high school levels. In this account I will describe my visit to the Ann Arbor High School, Ann Arbor, Michigan. Ann Arbor High School is a "comprehensive" high school, or what we would call the "multipurpose" high school. It was started over a hundred years ago in 1856. In 1907 a new building was constructed "to meet effectively the needs and interests of youth in a modern world". The new high school has been constructed with extensive facilities and modern equipment. It is situated on the outskirts of the city on a site of 177 acres. The cost of the building is nearly six million dollars. It is nearly 330,000 square feet in area. There are 1700 students and 87 members on the teaching staff plus 10 members on the office staff, 18 for custody and maintenance of the building and 13 in the cafeteria.

About one-third of the students enrolled are in the industrial and commercial arts sections. About 60% are in the academic sections. The school has two distinct feature. About 5% of the students who are of outstanding ability, as judged by achievement tests and general scholastic aptitude tests, are given advanced training particularly in English, mathematics and a foreign language. These students may get college credit for some of their extra work in the high school. This is a great incentive for the pupils as well as teachers to do their best. Incidentally I would like to mention that at the Eastern Michigan College I saw about fifteen high school students staying on the campus to find out whether they could seek admission in that college after finishing their high school examination. They were not only having a look at the campus and its facilities, they were also attending classes and observing the teachers doing their work and the way in which the students participated. They were interviewing the college teachers. We also found at the University of Michigan, Ann Arbor, groups of parents going round the campus and studying its facilities to be in a position to advise their boys and girls about the University.

Yet another unique feature of the Ann Arbor High School stems out of the law which requires that children should be in schools till they are 16 years old. About 2% of the students, more than 30 children, who are from 48 to 75 I.Q. are admitted to the school. They are given ungraded training for three years in 3

R's, citizenship, art etc. At the end of three years they are given a certificate of attendance.

The principal told me that the I.Q. of the students in the school ranges all the way from 48 to 170. Thus the school is "comprehensive" in more ways than one.

I have said before that about one third of the students are taking either industrial or commercial arts. When I asked the Principal why agricultural courses were not included, he replied that the farmers did not want their children to be trained in agriculture at the high school level. He said that in 1950 there was a conference of about 100 citizens who were asked to give their views about what facilities the school should provide for the children. Those of the members who were farmers opposed the inclusion of agricultural courses in the high school because they felt that they could give their boys this instruction on their own farms. They wanted their boys and girls to learn what they themselves could not teach i.e. industrial and commercial arts and the academic training. They were of the view that if the boys wanted to learn agriculture they would send them to the Agricultural colleges after their training in the high school. This is strongly reminiscent of the reaction of villagers in India to the basic schools and the agricultural schools. The rural people want their children to be trained in the way in which the city children are being trained. Now that we are in the process of opening a large number of multipurpose high schools in our country, it would be advisable to get the opinion of parents about the type of education they want for their children. Sample surveys could be made to ascertain the opinion of parents.

As regards the content of school work in Ann Arbor, 50% is "required," and 50% "elective." The Americans do not use the word "compulsory". The required courses are English composition, social studies including American history and

American government, mathematics, science and physical education. The students can elect industrial arts, commercial arts or academic work to the extent of 50%.

When one visits the elementary, junior high or senior high school in the U.S., one is struck by four features: (a) the emphasis on health education, (b) athletics and recreation, (c) cafeterias, and (d) group music. These features are to be found right from the elementary to the university level. We do not find the big difference that we do find in India between the school facilities and college facilities. It is only some outstanding institutions like the Doon School at Dehra Doon, or Christian College High School at Madras, or the public school at Nilgiris or Ramakrishna Vidyalaya at Mysore that are able to bridge the gulf. The Ann Arbor High School has 1841 corridor lockers where the children can lock their books and belongings. Provision is made for 1160 students to "check" their overcoats, etc.

The school's activities can be divided under three heads: (a) curricular, (b) extra-curricular, and (c) guidance. The extra-curricular activities are integral to the school. They include athletics, music, art, dramatics, debating, public-speaking, dance, newspaper. The students have their council. They get training in democratic processes by electing their representatives to the council. The principal remarked that as in the city, only 70% of the students register themselves and exercise their right to vote!

An idea of the facilities for extra-curricular activities could be formed by knowing the floor space provided for them. The area of the boys' gymnasium is 93' x 116' and that of the girls is 67' x 116', both indoor. The activity room is 160' x 116'. They are in two floors. The swimming pool is 75' x 44' and 1350 people could sit and watch the swimming contests and displays. The auditorium has 1780 permanent seats. The "little theatre", the school cinema hall, has 266

seats. Pictures pertaining to class work as well as for entertainment are shown here. There are two cafeterias each with provision for 300 children at a time. The library has 14,000 books and can accommodate 160 students in its reading room (106' x 47'). Adjacent is the study hall (55' x 47') which can accommodate 180 students. Eight rooms are set apart for music classes and practice. The school has its own choir and symphony orchestra. At Eugene, Oregon, we went to a high school symphony orchestra. More than 200 boys and girls participated in the orchestra and choir. The auditorium there was slightly bigger than the Ann Arbor School auditorium and had more than 2000 seats.

Another unique feature of the Ann Arbor High School is its planetarium. The local ice cream company has constructed at its cost the soda bar, the local flower shop has equipped the greenhouse, the potters' guild have donated ceramic pieces. The various business and manufacturing companies identify themselves with the school and equip it. This is worthy of emulation in our country so that our schools will be rich and varied in their equipment.

The guidance service consists of the Director of Vocational Education who supervises vocational training and testing, the psychometrist who administers the scholastic aptitude tests, the social psychiatrist who gives advice to special consultants with respect to behaviour problems, the speech therapist who gives corrective speech exercises, the "home bound teacher" who maintains contact between the pupil at home and the school programme. The guidance committee also consists of the class advisers who direct class projects and refer students for testing, the college consultant who advises parents, teachers and students in matters relating to college and sets up college information conferences, and the nurse who supervises all health services and keeps health records for each student, and the physician who examines all new students.

The school day starts at 8.20 a.m. and goes on to 3.20 p.m. with half an hour for lunch. The teachers as well as students in

schools and colleges work eight hours break a day for five days a week. There is no difference between the hours of work of the factory labourer, the office clerk, or the school teacher. This contributes to efficiency. Children are trained in the schools to work and play for long periods.

Before concluding it may be remarked that 70 of the 80 members on the teaching staff have M.A. degrees and the rest B.A. degrees. I have seen many teachers in the high schools with Ph.D. or D.Ed. degrees. This perhaps is one of the most important factors contributing to the efficiency of the American school system.

## France

### **Design for Youth by Jean Benoit Levy**

"WHAT is the younger generation coming to? Things were not like that in my day!" People of every generation make this sort of remark about the next, forgetting that their own fathers and grandfathers said exactly the same thing before them; for guiding young people into activities that will benefit both them and the community has always been a problem and probably always will be.

One of the ways of getting girls and boys to take part in the life of the community in which they live and work is through youth movements and extracurricular activities. And, in fact, never before have there been so many special activities arranged for youth. There are special organizations and clubs in every country. To help them expand and develop their projects on an international level, Unesco has set up a system known as the "Associated Youth Enterprises".

This term can best be explained by an example, and the one I have chosen is a "youth enterprise" sponsored by the French National Commission for Unesco and organized by the French Institute for Popular Education.

It was a study course on low-cost home decoration held in a chateau at Marly-le-Roi, just outside Paris, for youth groups from all over France which

were planning special decoration projects.

I dropped in on one of the seminars during its final day of work and was struck by the friendly atmosphere. Boys and girls had come from all over the country to exchange ideas with one another and profit from the experience of well-known architects and decorators. What particularly impressed me was the complete freedom with which the young people discussed matters with their advisers—I use the word adviser rather than instructor, since the adults were there only to answer questions and to solve technical difficulties.

The purpose of the meeting was not to train technicians or specialists, but to stimulate good taste and new ideas about decoration, colour harmony and so on, and, as a by-product, to encourage the "do-it-yourself" approach. Its title "Le decor dans la vie quotidienne" is difficult to translate into English, since the French word "decor" means both "decoration" and "setting". What the course set out to prove was the need for a pleasant setting both in the home and in community life.

During the short time the course lasted, it achieved quite a number of things. Here are a few examples:

One group of half a dozen youths had the task of drawing up plans for a cultural centre in Valencay, a small town in the centre of France. When I arrived, the discussion was proceeding at full steam, with each member explaining his ideas, to his fellow-trainees and to the adviser, a young decorator. The plans for the centre included a lecture hall with a stage and a film projector, a library and a sound-proof room for a television set and a record-player.

The seminar gave this team of youngsters a chance to benefit from the experience of well-known specialists, including an architect and the chief window dresser of a Parisian department store. The architect, who happened to have an office in the town of Chateauroux near Valencay, became so enthusiastic that he agreed to handle all the technical problems of the new centre without charge.

Another group had an entirely different

problem. It was planning to set up a cultural and recreation centre for workers in a shoe factory at Nancy in eastern France. The factory had offered plenty of space for the centre, the plans were very appealing, and the engineers were willing to help the young workers carry them out.

But there was another problem, this time a psychological one. Since the centre would be on the factory premises, how should one set about getting the young workers to return to the scene of their jobs for a social or recreational evening? The team was well aware of this problem, but its members had plenty of imagination and they seemed confident that ways could be found to attract their fellow workers to the centre.

Other groups were studying other projects. It is early yet to know what the results will be, but if these projects are carried out successfully, the French National Commission for Unesco plans to encourage similar ventures throughout France. (Unesco News)

#### *European Educators Meet to discuss School Programmes*

Educators from 23 European countries plus Morocco and Tunis met in April, 1958 at Sevres, near Paris, under the auspices of the French National Commission for Unesco to re-examine what should be taught in their High schools. Among other problems, they considered how much science should be introduced into High schools—a problem that is bothering European educators as much as educators elsewhere, despite the fact that their High schools are considered among the finest in the world.

Explaining the background for the meeting, Unesco's Director-General stated: "The European Secondary school curriculum has been built up over many, many years. The question now is: how can educators expand courses in science and social studies to meet new technological demands into an already full curriculum without overburdening the student? How can they reconcile traditional cultural values with the neces-

sities of a society progressively more oriented towards science, technology and economics?"

Educational experts from Unesco point out that many European countries are faced with the necessity of extending free compulsory education to the age of 16 and even beyond, a necessity that is creating an upheaval in educational systems that have been running with little change for the past 75 years.

Specific points covered at the meeting included : how to select children for the different types of Secondary schools and at what age ; how to cope with the increasing number of students entering or wishing to enter High schools ; raising the age limit of compulsory schooling ; psychological aspects of teaching ; the role of teachers and teacher organizations in revising school curricula ; how much general culture and how much specialization a child should receive from schools.

(Unesco News)

## GERMANY

### Amateur Photo Competition

A photographic competition open to young people in Europe was held by the German National Commission for Unesco in collaboration with "Photokina" (International Photo and Cinema Exhibition, Cologne). The competition which closed on 31st March, 1958 was based on the theme "How We Live," and covered the following photographic subjects: Youth at work, including school and apprenticeship activities, and young people working on their jobs ; Youth at play, including organized spare time activities (sports, youth clubs, etc.) as well as personal pastimes and hobbies.

All young people up to the age of 25 were eligible to enter the competition.

An international jury will make a selection of photographs from among the entrants for display at an exhibition which will be held at Cologne, Germany, from 27th September to 5th October 1958.

Prizes will be awarded to participants from each country. The amateur photo-

grapher whose picture is selected as the best from each country will be invited to visit the Peoples Republic of Germany for a period of ten days. (Unesco News)

## UNITED KINGDOM

### Education and Careers

A large-scale exhibition showing how education is fitting boys and girls to take part in national life in the United Kingdom is to be held in London next year. Sponsored by the National Union of Teachers, it will show the role and work of schools and educational establishments of all kinds, and the opportunities available both in education and in employment.

The story of the development of the education system in the United Kingdom will be traced through the years, and modern teaching methods and equipment will be shown in use. Besides a display of the creative work of children and students in all branches of education, there will be demonstration classes with hundreds of boys and girls, students and teachers. Numerous performances of music, drama and other in-and-out-of-school activities will be given.

The display is being planned in collaboration with all branches of the education and careers' guidance services, as well as with the support of the Ministries of Labour and Education.

(Unesco News)

## UNITED STATES OF AMERICA

### Unique Collection of Science Books

A collection of first editions of scientific works spanning scientific theory from Aristotle to Einstein was recently exhibited in New York. Under the title "100 Books Famous in Science", the exhibition displayed first editions including dedication, presentation and authors' copies covering the key theories by which scientific thought has evolved through the centuries.

The Grolier Club, a leading private club of book collectors in the United States, organized the event. Scientists

were consulted and a list of the most important books in the history of science was drawn up. A search was then made for the most important copy available of each work. The result is a unique collection of the great scientific classics, contributions in a variety of languages to the progress of civilization on the scientific front.

Among the books shown were : the presentation copy of Copernicus' "De Revolutionibus" from Joachim Rheticus ; the dedication copy of "Dialogo" written by Galileo and presented by him to his patron the Duke of Tuscany , Ptolemy's "Cosmographia", the first atlas ; and proof sheets of "The Origin of the Species" with hand-written notes by Darwin.

The books have been assembled with the help of leading libraries and collectors, and important contributions have been made by the United States Library of Congress and the A.M. Gorki Science Library in Moscow. (Unesco News)

#### "Little Travellers"

A newspaper column for children which seeks to show them something of life in countries all over the world and promote international friendship is being edited by an American woman. Mrs. Eleanor Hicks, of Palo Alto, California. Entitled "Little Travellers", the article takes the form of an imaginary flight to a foreign land, describing scenery, people and familiar animals found there. An added attraction is a black-and-white illustration for the children to colour.

A number of newspapers in the United States and Canada are subscribing to the column as a means of providing reading matter of educational value for their young readers and of developing a "newspaper habit".

"Little Travellers" has made a special effort recently to include material on Asian countries. (Unesco News)

## MISCELLANEOUS

### Unesco Publications

#### "Do-it-Yourself" Science Book

Unesco has recently brought out a book under the title "Source Book for Science Teaching"\*, which offers practical proof that no teacher anywhere in the world need be handicapped because he lacks the "proper" equipment for presenting science to his class. Material for making laboratory equipment exists everywhere—in the home, around the school itself, in the junk-yard, at the food market, in the garage and in the countryside to mention but a few sources. Science teaching facilities and resources are all around us and just waiting to be made use of. For example gravel pits and stone quarries can demonstrate the evolution of the earths surface ; woods provide a natural laboratory for the study of animal and plant life, climate and seasons ; buildings under construction show how materials are used, or the working of technical installations. Then there are easily-arranged school facilities : science corners, aquaria, animal cages, weather stations and museum shelves.

Into 220 pages the Unesco "Source Book for Science Teaching" has managed to cram enough material to satisfy the tastes and needs of teachers all over the world who clamour for ways to plan and carry out science programmes in which the subject is experienced and not just learned.

The greater part is taken up with suggestions for making science equipment and performing science experiments with the simplest materials—from pegs and cotton reels to bottles and saucepans, from nails and needles to toothbrushes and vinegar. (Unesco News)

\*Unesco Source Book for Science Teaching, Unesco Paris. Price : \$2.50 ; 12/6d ; or 600 French franc .



# book reviews

**The Teaching of English in India**  
by R.L. Mehta. Published by Orient  
Longmans ; Revised Edition 1957 :

No teacher of English in India should miss reading this stimulating and valuable contribution to methods of teaching English. The revised edition of the book does not seem to differ in any way from the original version published in 1950, except for the addition of two chapters dealing with later developments. The chief merit of the book lies in its practical and imaginative approach to the problems of language teaching. The author has described with many illuminating examples methods used by him in fifteen years of teaching experience, and their complete success can be gauged by the samples of students' work included in the text.

The main part of the work is devoted to the discussion of topics such as oral work, intensive and extensive reading, composition, story-writing, essay-writing, home tasks, pronunciation and literary appreciation. Each chapter includes a wealth of suggestive detail and practical hints which can be used as a starting point by teachers. The best sections are undoubtedly those dealing with poetry and literary appreciation.

In the teaching of poetry, the author aims at developing sensitivity and critical ability, and demonstrates how, by good reading and intelligent questioning on the part of the teacher, literary appreciation

may be built up. He shows how the content, feeling, imagery and rhythm of poem can be effectively conveyed to students by a careful technique of imaginative questioning. Similarly, in composition, he demonstrates how creativity and self-expression can be encouraged and an individual style developed. These chapters are well worth detailed study.

Critical appreciation of literature and creative writing are aims that can be set only for students who have already achieved a certain command over the language. On the problem that confronts most teachers of English in India today, that of developing basic language skills, this author has little to say. For instance, he rightly condemns the old-fashioned practice of teaching large chunks of grammar out of grammar books, and maintains that the abstract knowledge of rules does not help students either to speak or write better English. But what alternative does he offer ? He suggests correct usage. But correct usage is a sign of achieved mastery of language rather than a means to achieving it. The problem of giving training in correct usage is precisely the one with which we are faced today, and for this the solution offered is "to catch them young and soak them in the correct usage so that they eat it, sleep it and dream it". Shri Mehta, with his public-school background, has evidently been accustomed to dealing with children who have heard good English spoken around them, both at home and at school from their earliest

years, and his advice is applicable in such cases. For the rest of us, constant oral drill of various types based on graded structures seems a more practicable alternative. Shri Mehta has recognised this fact in his last chapter and deals with it somewhat half-heartedly. He is not really at home in this new territory and would have done better to have omitted it altogether. The omission would not have been serious in a work whose primary usefulness is at the more advanced level of English teaching.

It is a pity that a book otherwise so excellent should be marred by the introductory chapters. The author, who is obviously an enthusiastic, inspiring and successful teacher in the classroom, shows himself outside it as a victim of strong prejudice, false reasoning and a sad confusion of thought. In the chapter on the future of English in India, he marshals an impressive array of firstlys, secondlys and thirdlys, but the discussion which follows is confused, and he ends by stating that English is to be learnt for its "usefulness, beauty, power and greatness of its literature"—reasons which are hardly likely to appeal to policy-makers in an age of education for the masses, and education which is oriented to more utilitarian aims. Later, when Shri Mehta remarks that the main purpose of learning English is to develop "critical ability and a mature sense of values" he obviously has in mind a study of literature rather than of language. In that case, it can be argued that the same aims could be attained by serious critical study of any literature and by good teaching of other subjects. The case for English in India today must stand or fall on other than purely literary grounds, and the lover of English literature should not be led away by enthusiasm into false reasoning.

It would be both distressing and unnecessary to give examples of some false categorical assertions, unsubstantiated accusations and other forms of prejudice displayed in the earlier chapters. It is suggested that readers omit the first

three and last two chapters, and concentrate on the main body of the work, which is original, challenging and full of interest, and can profitably be used as a work of reference by all teachers of English.

Mina Swaminathan

**New Reading:** An English Course for Schools : Published by Reader's Digest Educational Department, London, Sydney and Capetown.

When considering English textbooks for schools, what should be our criteria? A moment's thought will tell us that appearance, illustrations, contents and the language is the correct order. The first two need no elaboration for the importance of visual aids has been recognised. These readers—consisting of two sets with four books in each set—have attractive covers, good paper, wide margins, clear print and many illustrations. Unlike many English textbooks in our schools these will encourage careful handling and the desire to own a library.

The Reader's Digest claims to be one of the most widely read magazines. It appeals to all those who, not having had the opportunities offered by formal education, can acquire a thin veneer of wide reading by reading its articles with concentration and attention. And it appeals to those who need light reading for relaxation but have no time nor inclination to take up something long. The lessons in these books of New Reading are taken from the Digests, simplified and condensed. Thus they are on a variety of subjects each brimful with interest. There is the faithful collie, the lazy St. Bernard who pretended deafness to escape a walk, Waddles the duck who became the self-constituted guardian of the new baby, the elephant, the camel—described surprisingly as a gentle, friendly animal—the bear, porky (not a pig but a porcupine), birds, snakes, men and boys, science, history, whales and worms and a girl. Women are conspicuous by their omission. It is a pity that Asia and Africa, a treasure-chest of adventure, magic and stranger-than-

fiction stories, have been dismissed with very little mention. The reading matter is interesting. Keen English teachers will be grateful for this because the interest will tempt the class to plod through the morass of grammar and language study which must be crossed when prose is studied intensively.

The exercises at the end of each lesson will prove helpful to the teacher who cannot think out new and interesting exercises for the young and encourage them to think. The suggested readings, however, will be of no use in most of our schools for the books suggested are difficult to get, expensive and, unless abridged, too difficult for the majority of students.

Now comes the important question of language and for which class or classes these New Readers will be suitable. Unfortunately, in this country we have been caught up in such a maze of conflicting opinions on this subject that it is difficult to answer the question. However, in those of our schools where English is still the medium of instruction these books can be used profitably in the top class of the lower school and the lowest of the upper school. In the South where English is one of the compulsory languages from the lowest class upwards, these books will be useful in the equivalent classes but where English is begun in class VI these books will be too difficult. In case English is introduced at an earlier stage and its standard raised, these readers will serve to bridge the wide gulf which exists between the pre-matric and the matric standards. Those teachers who refuse to recognize that Indian English has an identity, will be glad to use these books for they have the vocabulary, the language and the style with which the students must be familiar when they enter the university.

If, however, one feels that these readers are too difficult as prose readers for intensive study for Indian schools (no book is too difficult in the hands of a teacher with whom teaching is a vocation) then they will make excellent books for

rapid reading. If the true aim of rapid reading is learning how to grasp the gist of the matter without foundering on language difficulties, or if it is to encourage reading for pleasure and to sustain interest, then surely no better readers could be chosen. Apart from this, these readers can contribute greatly to the work of the United Nations in promoting better understanding for they bring the world, with all its diversity, to our doorstep.

Mona N. Vergese

**Labour and Learning** by H.P. Smith,  
Published by Basil Blackwell, Oxford.

The rise and spread of labour movement has brought about changes in social structure and outlook. The university education has been, hitherto, to a considerable extent, the exclusive privilege of the rich, partly because the poor have been educationally a deprived class, and partly because entry in the university has been restricted to those who had a good preparation at a suitable school. With the growth of labour representation in Parliament and on municipal bodies, a new governing class was emerging from the ranks of the workers in the early 20th century in Great Britain, and it was felt that the university should make special provision for their education so that they could take over increased public responsibilities. Thus a movement called the Workers' Educational Association (W.E.A.) spread in England which aimed at bringing the universities to the workers, since they could not be brought to the universities, because during the day they were engaged in earning their livelihood.

Albert Mansbridge, a university extension student, became the knight errant and chief architect of adult and labour education. In his campaign for the educational aspirations of labour, he was able to secure the active cooperation and participation of Oxford University.

The history of W.E.A. is inextricably linked with the life story of Mansbridge.

In describing the W.E.A. movement, naturally the book gives us a picture of the early twentieth century in the precincts of Oxford University, with interesting and personal glimpses into the lives of a number of zealous pioneers and educationists like Arnold, Toynbee, Gore, Turner, Collier, John Ruskin, Acland and Jowett who were associated with the W.E.A. The book describes, in detail, the opening of the tutorial classes for workers (the 'outposts of the university') and the initiation of the courses of university study, specially designed for working men and women, the issue in 1908 of the Report on Oxford and Working Class Education, the recognition of the W.E.A. by the Board of Education and to the setting up of the present system of adult education on the basis of an alliance between the universities, the State and the W.E.A.

The author has made extensive use of excerpts from the speeches and writings of Mansbridge and his associates.

Mansbridge's approach was humane and spiritual. He criticized the 'competitive scholarship system of the day on the ground that it fostered the growth of unsocial qualities among the educated'. His conception, of W.E.A. was as of 'a spiritual force which aimed at transforming society through changing the values by which men lived'. He insisted that 'the higher education cannot be imposed upon the work people from above, but must be organised and managed by men who belong to themselves'. He regarded 'adult education and the claims of democratic citizenship as inseparable', and demanded that 'culture should not be regarded as the preserve of a superior social class but an activity in which working men and women could rightfully and fruitfully engage'. The book gives a useful lead to our educationists, since, in many ways, we, in India, are facing the same circumstances and are trying to solve the same problems as described in the book. But it does not provide detailed information on many points, e.g. the financing of the worker's

classes, summer schools for the labourers, the subjects taught and their scope; the response of labour in terms of their attendance and accomplishments in the classes; the ages of the work people who availed themselves of the classes; the quality of the instruction given and the work done in classes in relation to the university standard etc.

In spite of this, the book does make interesting reading and provides a useful background to educationists, university extension workers, and social educationists in understanding the needs and problems of adult education.

J. S. Gulati

### Filmstrips

*Country Dance (filmstrip)*: Colour, 24 frames (double); Production and Distribution—Educational Productions Ltd., 17 Denbigh St., London S. W. I.; Teachers' Notes by A. E. Halliwell, A.R.C.A., F.R.S.A.; Price 35 Sh. Suitable for general school use; Art appreciation analysis; Age Range 11 +

Pieter Brueghel the elder (1525-69) was indeed a very great 16th Century Dutch Artist, because he not only painted all things accurately and with great skill but he also made very beautiful pictures, arranging everything perfectly on his canvas and painting in glowing and rich colours.

This filmstrip gives a detailed analysis of the well-known painting, "Country Dance" by Pieter Brueghel. First of all we see the whole painting, which is then broken down to bring into focus the minute detail that the painter put into this work. Then the whole composition is built up to show the life and vigour of the work, and to help children appreciate for themselves the qualities of acknowledged masterpieces.

In "Country Dance" we see Brueghel as a man of great human sympathy with acute perception and interest in his fellow beings. He had a sense of humour and shared the peasants' laughter and coarseness and expressed in

his paintings what they themselves felt. His realistic inspiration led him to paint familiar scenes of village life and customs such as "The Wedding Breakfast", "Hunters in the Snow", "Country Dance", and many others showing the peasants at work and play. In "Country Dance" he gave full rein to his admirable genius.

"Frame 1 gives an overall view of the whole canvas which is 64" x 45" in dimension and is in the Kunsthistorisches Museum in Vienna. It shows a country fair at its culmination. A farmer leads his wife to the dance, accompanied by the music of the pipes. A table has been brought into the village street from one of the nearby buildings, and a number of men and women are seated at it, eating and drinking. Their outstretched hands suggest that there is some lively conversation taking place. A pair of lovers are kissing behind them and in the middle distance other couples are already dancing. In the background you can see the market stalls set out in front of the village church."

In frame 5, the artist holds a group of figures in movement in a very simple contour.

Frame 6 lends itself for an interesting discussion by the art teachers about the co-ordination of the main dancing group and composition of the picture. By careful analysis frame by frame the teacher can explain to a class of children or students, just how Brueghel developed his design and composition.

In frame 9, we have another look at the complete picture. It is interesting to note, according to A.E. Halliwell, that nearly all the figures in the composition are grouped in pairs, whether dancing or not, and one notices that the left half of the painting is in dark tones with small areas of light superimposed whilst the right half is light with small areas of dark tones.

With what patient care did Brueghel

paint is clearly highlighted in frame 13 which is a further study of one of the peasant farmers from the group seated at the table. Notice the beautiful painting of the features, the rugged contours and wrinkles.

Everything in the painting has movement in keeping with the subject of the "Country Dance". These movements are accentuated in every case by feet lifted from the ground or hands held up in the air. Even the swinging bunch of keys supports this motion. The sombre clad burgomaster, together with the gaily coloured jester, mark the time for dancing. The way hands have been painted shows a remarkable expressionist power. All the primitiveness of these peasants and their character are clearly expressed in these details. In "Country Dance" one can observe the warmth and gaiety of a summer day four hundred years ago.

*Children's Games (filmstrip): Colour ; 28 frames (single) ; Production and Distribution—Educational Productions Ltd., 17 Denbigh St., London S.W.I ; Teachers' Notes by A. E. Halliwell, A.R.C.A. F.R.S.A.; Price 27 Sh. 6d.; Suitable for general school use, Art appreciation analysis, History ; Age Range 9+*

Before studying the picture "Children's Games" three other lovely paintings typical of the work of Breughel are shown in the first 3 frames of the filmstrip, viz.,

1. "Hunters in the Snow", 1565
2. "The Peasant Wedding", 1568
3. "The Wedding Dance", 1566

Frame 4 of the filmstrip shows the complete canvas of "Children's Games" and then picks out tiny details from this very comprehensive picture. The commentary raises points of discussion of both art and historical significance. Children's games of the 16th Century would seem to vary little in detail from children's games today.

## SECONDARY EDUCATION

This picture is a record of many of the games that children played in the life time of the artist. The scene is set in a Flemish village square 400 years ago, with a stream running by on the left, and the village street going away in the distance on the right, whilst in the foreground the artist has arranged a large open space for the children to play in. The whole arrangement, or composition, was planned as a background for the children which are the main interest of this picture. It is crowded with dozens of girls and boys playing games.

As we see details of parts of this picture in successive frames of the filmstrip, there appears to be a close parallel between the games children played 400 years ago and their games today like spinning tops, wrestling, guess which hand, leap frog, game of knuckle bones, ride on clasped hands, bowling hoops etc. A close up of frame 6 shows two boys swinging on a mounting block and a boy on stilts—children still love to do this whenever they find a suitable rail or stilts. Of course there is a marked difference in their costumes.

In frame 21 we notice how the dark and light background accentuates the colours of the children's clothes, how the artist has purposely painted the light-coloured garment against dark and the darker ones against a light ground. In frame 28 once again we can see the complete canvas of Pieter Brueghel's "Children's Games" to remind us what it looks like, after seeing the component parts of it. While this filmstrip forms an excellent basis for advanced study of Brueghel's work, it will, at the same time, introduce young children to the works of a master, and give them a deep interest in "looking at" paintings.

In "Country Dance" the double frames are not numbered. There is a distinct disadvantage involved in the learning process thereby. The text manual along with the filmstrip is fairly exhaustive and

written in a lucid style.

Suggestions : Two or three schools with the help of the Extension Services Departments could take up a project of making 12 filmstrips on the famous paintings of India along similar lines. Children will not only learn to appreciate the great masters thereby, but a greater inter-State and international understanding will be promoted by a wider circulation of such excellent authentic art filmstrips. Museums should make an all out effort to stock such filmstrips and run a loan service for the educational institutions apart from arranging regular screenings for the public in their premises.

Homai Jal Moos

**Silver Jubilee Souvenir Volume**  
edited by Dr. Kalinath Nag and Shrimati Sushma Sen Gupta ; Brought out by Lake school for Girls.

Lake School for Girls, Calcutta, has brought out a silver jubilee souvenir volume on the completion of 25 years of its life as a pioneer institution for women's education at the Secondary level in West Bengal. Shrimati Sushma Sen Gupta, the founder Principal of the school, has described in the Volume how from small beginnings in 1933, the school has grown into a big institution. At present the school provides facilities for the promotion of arts and crafts, literary activities, histrionic arts, music and dance, debates and discussions games and sports, N.C.C. and social services.

The Souvenir Number has an attractive cover and some very good photographs of the school's curricular and extra-curricular activities. It contains articles by writers like Dr. Jadu Nath Sarkar, Dr. S.N. Roy and others on the progress of women's education in Bengal.

B. N. Ahuja

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# To Our Readers

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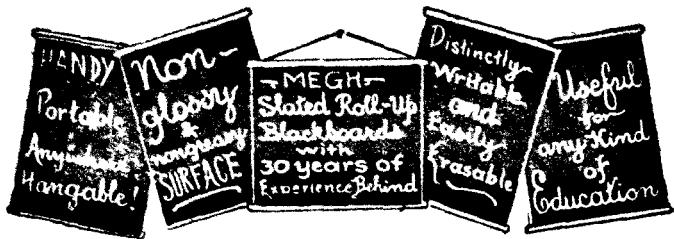
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## Trekking In The Himalayas

A view of the  
'Lahaul valley'  
(Rohtang pass)  
—13,800 ft.

(See article  
on page 34)



## *This Issue*

The defects of our examination system have been pointed out over and over again and the need to reform the system has been universally recognised. Analysing the problem, the Secondary Education Commission said that the examination system needed reform and a new approach altogether because (a) in the context of a new concept of education in which the school of today has to concern itself not only with the intellectual growth of a pupil but also with his emotional and social development, his physical and mental wealth, in short with a total development of his personality, examinations to be of any real value, should be able to assess in detail the all-round development of pupils ; and (b) even in the limited purpose of judging the intellectual attainments of pupils, the present pattern of examinations, based as it is entirely on essay-type questions, is faulty and out of date.

It is this question of examination reform and evaluation that has been taken up for discussion from various angles in this issue. In the article "What is wrong with our Examinations ?" the writer not only points attention to the limitations of the examination system but makes suggestions on how examinations can be geared to the broad objectives of education so that they exercise a stimulating influence on the processes of teaching and learning. The article "Evaluation Approach and Examination Reform" explains what is meant by the "evaluation approach" and outlines in brief the programme of examination reform undertaken by the All-India Council for Secondary Education. Other articles bearing on some vital aspects of evaluation are "Personality Assessment in Schools" discussing the methods of personality evaluation, "A Cumulative Record as a Record of Internal Assessment" and the ex-

periment of the Ajmer Board in the use of objective type questions in examinations.

An interesting article and of special value because it is by a teacher, is on the present-day system of inspection in which the writer speaks frankly of his experience of inspectors and makes a few worthwhile suggestions on how inspection could be reoriented to meet the needs of schools and the staff. Our readers will be equally interested to read the article on "Teaching English Literature" in which a teacher contends that young children are capable of understanding and appreciating the classics provided these are presented to them in the correct way. Other articles of general interest bear on building up a city guidance service seeking to cover every school in a particular area and function as an integral part of a school's programme of work, accounts of school projects and educational news from India and abroad.

# EVALUATION APPROACH AND EXAMINATION REFORM

**PERHAPS** the most vital and pressing problem of secondary education in India today is the need to effect reform in our examination system which as it exists in our schools and colleges is completely inadequate to meet the challenging needs of a fast growing democratic society. It is indeed rightly alleged that it is mainly because of the present examination system that education has failed not only in fostering healthy habits of learning and research but in preparing the child for life itself. Under its pressure teachers have become a mechanical instrument trying to push bits of information to passive listeners while pupils in their turn have become rote memorizing 'automatons' pouring out mugged up information verbatim in the examination halls. It is common knowledge that the main concern of our teachers is to adopt such methods of teaching that would ensure greater pass percentages and distinctions for the pupils in public examinations. Hence, we find the school book-shops crowded with books called "Keys", "History made easy," "Civics in seven hours," and so on. Examinations are thus the major cause of our educational malaise, exercising unhealthy influence on the purposes of education, curricula, teaching methods, pupil learning, school practices and even social values.

## Eliminate or Improve

How are we to meet this situation ? We know that the present examination system is inadequate, out of date and equally harmful to the very objectives of education if it is allowed to continue for long but still we cannot eliminate examinations for they are intricately

interwoven with our social values and needs on the one hand and with the syllabus, student motivation and learning, teacher motivation and teaching methods on the other. Indeed these relationships are so strong that they may be regarded as even more central and significant than any of the different separable parts of the educational system. Attempts to change the examinations must therefore take full cognizance of these relationships or the entire educational system will be thrown out of gear.

By  
D.M. Desai and T.S. Mehta  
*All-India Council for Secondary Education  
Delhi*

How then can examinations be improved ? By using such forms of questions that can be accurately scored ? By asking larger number of questions ensuring an adequate coverage of the prescribed syllabus ? By shortening the duration of the examination ? By assigning adequate weightage to the pupils' sessional work ? By using the five-point letter grade-scale in place of the hundred

numerical marks ? All these measures undoubtedly seek to remedy some of the glaring defects of the present examinations, but they touch merely the fringe of the problem. The core of the problem, which is the improvement of instruction with all its adjuncts (learning experiences, curricula, teaching methods, textbooks etc.) is not touched at all by any of these measures. No examination reform will bear fruit unless it brings about corresponding changes in student learning, teaching methods and the subject content.

## The evaluation approach

The question posed above brings us to what is known as "The Evaluation Approach." This approach is based on the assumption that education always

operates in the service of some purposes and as a process it brings about desired changes in the way the individual thinks, feels and acts.

As a result of this process individuals are expected to improve their ways of thinking, develop tastes and sensitivities, modify their attitudes and improve in other desired ways. Appropriate learning experiences provide the means to achieve these educational goals. Now, evaluation is an integral part of this educational process. It determines to what extent the educational objectives are actually being realised by the programme of curriculum and instruction. Thus the objectives serve as the basis for developing both learning experiences and evaluation procedures. The learning experiences and evaluation procedures in turn help to clarify the objectives. There exists an inalienable reciprocal relationship between these three main elements of a well planned programme of education. "The desired changes in students represent the purposes or ends of instruction, while the evaluation procedures and learning experiences provided to students are the instruments or means related to these ends. An achievement in examination is not good or valid unless it appraises the kinds of changes in students which instruction seeks to bring about. A teaching method is not good or appropriate unless it brings about the kinds of changes which are regarded as the goals of instruction". Evaluation thus does not differ from instruction in purposes, in methods and in materials.

This close tie of educational objectives, instruction and evaluations gives us the direction for the desired examination reform. Briefly, the steps envisaged to make a start are—

- (1) Defining precisely and clearly more significant and meaningful curricular objectives than the present single objective i.e. the acquisition of information.
- (2) Translating these objectives and defining them more specifically

in terms of desirable changes in pupils' thinking, feeling and actions. (In evaluation terminology they go by the name of desirable pupil behaviour patterns).

- (3) Developing and organizing learning experiences (materials, methods and techniques) for bringing about the kinds of growth in students specified by the objectives. This would entail the reorientation of the present methods of teaching, pupil learning and also the school syllabi.
- (4) Developing examination procedures related to educational purposes other than the acquisition of information. It would mean the preparation of such testing tools which would best appraise the attainment of objectives by the pupils and the success of the learning experiences. These evaluation tools will also identify the strengths and the weaknesses of the whole instructional plan and will make it possible to note in which respects it needs improvement, in which measure the teaching techniques have been able to deliver the goods and in what measure they need a complete overhaul. Thus evaluation would determine the effectiveness of courses and educational programmes and provide a sound basis for improving them. Improvement in examination would ultimately lead to improvement in instruction. This evaluation approach has met with general approval in official and non-official quarters. For instance, the Bhopal Seminar on Examinations held in March 1956 and the conferences of the Chairmen and Secretaries of Secondary Education Boards held in the same year have endorsed this approach. The All-India Council for Secondary Education has

adopted it in its action programme for Examination Reform. And recently the University Grants Commission has also accepted the fundamentals of this approach.

### **Programme of Examination Reform**

The All-India Council for Secondary Education has recently launched its programme of examination reform in right earnest. With the help of experts, the Council has drawn up a phased programme which underlines the intimate relationship between educational objectives, learning experiences and evaluation procedures. Following the recommendations of the Bhopal Seminar on Examinations and the Conference of the Chairmen and Secretaries of the Boards of Secondary Education, the Council has set up an Examination Unit to implement this programme of examination reform. The Examination Unit in its turn has drawn up a blueprint to work out this scheme. It proposes to run a number of workshops of subject teachers with a view to acquainting the teachers with such a kind of approach to teaching, learning and evaluation, to help the teachers to think about worthwhile curricular objectives and prepare a large pool of learning experiences and evaluation tools that could be used by schools and Secondary Boards in internal and external examinations respectively.

Briefly speaking, the plan of work drawn up by the Examination Unit includes activities such as :

1. Careful study of the different subject syllabi framed by various Secondary Boards of Education for High and Higher Secondary schools together with the scrutiny of the Examination papers set at the public examinations conducted by these Boards. On the basis of this study, it will fix up the priority of the curricular objectives to be taken care of in the first two or three years of the phased programmes.

2. Conducting the Evaluation Work-

shops with carefully selected Secondary school teachers to prepare a large pool of evaluation tests and learning experiences on these specified objectives.

3. Enlisting the association of teachers of training colleges and competent experienced teachers in developing learning experiences, appropriate to the objectives selected for the first two or three years. The development of learning experiences, which requires new skills on the part of the teacher and a different type of learning from the student is a somewhat slow process and would require the wholehearted and close cooperation of the training colleges and extension services departments, subject teacher associations, research institutes and bureaus.

4. Making available these learning experiences to secondary schools, training colleges and secondary boards etc., so that the learning experiences may be employed in instruction in secondary schools.

5. Making available to the Boards of Secondary education a pool of evaluation questions that could be used in the external examinations by Boards of Secondary Education. Secondary schools will also make use of these evaluation tools in internal examinations for assessing the progress of the students as well as for diagnostic purposes.

6. Undertaking at some later stage the work of standardizing achievement tests in equivalent form in major Indian languages that could be used for diagnostic purposes by different groups.

7. Undertaking research and investigations on some pertinent problems related to evaluation.

In brief, this is the plan of work of the Examination Unit for the first two or three years. On the basis of the scrutiny of the syllabi of different States in different subject fields and also the examination papers of the various Second-

ary Boards the Unit has decided to work for the first couple of years on two most important objectives, namely, the acquisition of knowledge and its application in unfamiliar situations. Internal and external evaluation procedures and learning experiences will be developed to serve these purposes. In subsequent years the idea is to extend the activities of the Unit to other important objectives of Secondary education. To see that the scheme works effectively, it is necessary to go slow and gradually bring about the

development and acceptance of additional purposes for learning and their incorporation into the classroom instruction and the examination.

Examination reform would be a patient and persevering task which would need the willing and active cooperation of many agencies in education, both official and non-official. But to the largest measure it would need the enthusiastic support of the secondary school teacher who is the pivot of all educational endeavour.

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'Perfection consists not in doing extraordinary things but in doing ordinary things extraordinary well.'

—Angelique Arnauld

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# WHAT IS WRONG WITH OUR EXAMINATIONS ?

THERE is general dissatisfaction with the prevailing system of examinations and there is an urgent cry that unless something is done to reform the system, the new educational structure we are trying to build to meet the needs of a modern society will be completely without substance or any lasting use. The main criticism levelled against the examination system is—(a) that it measures only *some* of the objectives of teaching particular school subjects and ignores some important qualities and educational outcomes; (b) that it measures the attainments of pupils on the basis of a single performance at the termination of the school career, leaving out of account pupils' progress over a number of years; (c)

by

that it leaves room for subjectivity in marking i.e. the same work is likely to be evaluated differently

by different examiners and (d) the manner and form in which results are stated impair their utility for purposes of selection for employment or higher education. These defects of the system tend to distort the processes of learning and of education as a whole and to reduce the confidence of the people in education as well as examinations.

## Gearing Examinations to the Objectives of Education

What is the remedy? It is almost universally accepted that examinations should base themselves on the syllabus. If, however, it is realised that a syllabus is merely a means towards the realisation of certain educational objectives, it will be granted that examinations based on syllabi retain only an indirect link with the objectives of teaching a school subject. Such examinations only too easily tend to ignore some, and not often,

most of the objectives. To take an example, texts in language or literature courses constitute the material which is to be used in giving pupils practice in reading with comprehension and appreciating the fine points in language and idiom among other objectives. An examination, however, which bases itself mainly or solely on previously studied text misses these objectives and rewards only the ability to reproduce memorised explanations and appreciations. The objectives in view would perhaps best be tested by placing before pupils previously unread material of sufficient length and complexity and asking questions on that. Similarly, in order to test ability to apply scientific principles to new situations, it

will not do to ask pupils to describe an application of scientific principles which they have already

studied. It would be necessary instead to describe to the pupils a situation in which scientific principles already studied by them find application and to ask questions which involve the ability to apply known principles to this new situation. A scrutiny of examination papers in different school subjects reveals that they are today heavily loaded in the direction of memorisation and reproduction of memorised material and that other objectives of teaching school subjects tend not to be tested. In view of the fact that examination results are almost the only index of pupils' attainments available to parents, teachers, higher institutions, employers and the public in general, it is no wonder that teaching work in schools tends to emphasise memorisation of facts at the expense of other more desirable outcomes of learning.

It would appear then, that a more fruitful method of organising examina-

tions than at present would be to specify to examiners of particular school subjects the specific objectives of teaching that subject and their relative importance, and to assist them to frame questions which test these objectives. Worked out and implemented in consultation with the educators of the country, such an approach to examinations can become a great factor in strengthening the efforts to improve the processes of teaching and learning now under way. The enormous prestige attaching to written external examinations which today encourages rote memory and inhibits the more important outcomes of teaching and learning can be utilised in the opposite, desirable direction provided clear, unambiguous and widely accepted statements of objectives could be worked out and translated in terms of corresponding forms of questions. These two tasks are related to a single specific understanding : What should a pupil be able to do if a particular objective of teaching has been realised ? In other words, an objective has to be translated in terms of a number of 'behaviour changes' which would signify the attainment of that objective. To take an example, the objective "knowledge of scientific principles" involves behaviours such as the ability to state a principle correctly, to detect errors in a wrong enunciation of the principle, to recognise the assumptions underlying the principle, to know the conditions under which the principle holds valid and, presumably, a number of other behaviours. A comprehensive statement of objectives and visualisation of the meaning of the objectives of teaching any school subject in terms of clear and specific behaviours on lines indicated above could at once lead to the kind of examination questions which would test these objectives and teaching procedures and learning experiences which would promote them.

Thus, the reform of written or, for that matter, practical, external examination calls for efforts to bring together experienced teachers and training college people or other experts to work out objectives which command widespread

acceptance, and corresponding behaviours, learning experiences and question forms. It is necessary too, to ensure through comprehensive directives to examiners and through review by boards of moderators in the light of these directives that examiners set questions which test the objectives in view and give the different objectives the kind of weightage that is desirable. It will perhaps also be necessary to educate and inform teachers sufficiently in advance about the nature of changes in examinations envisaged, to indicate to them the learning experiences leading to the behaviours and objectives in view and to change the nature of examinations gradually, say 25% of the questions in the first year, another 25% in the next year and so on. This alone will ensure that undue hardship and dislocation of the educational system do not take place and improvement of the processes of teaching and learning to which examination reform is merely a means is able to keep pace with the reform.

It would be relevant to point out at this stage that what is envisaged here is a change in the content of examination questions and not merely their form. A mere changeover from essay to objective type of questions will not do and may, in the hands of unskilled constructors of objective tests, do more harm than good by emphasising memoriter learning even more than at present. But it is nonetheless true that objective, and in cases where this is not possible, short answer types of questions can be constructed to test most of the objectives of teaching school subjects. These will have the additional advantage of reducing if not completely eliminating subjectivity in marking and at the same time examining over a much broader and more representative sample of the curriculum than the present essay type examination can. Thus chance elements will tend to be reduced and a pupil's proficiency over the entire field will be more nearly tested. The reformed examinations will, therefore, make much greater use of objective and short answer type of questions but not

## WHAT IS WRONG WITH OUR EXAMINATIONS?

eschew the essay type, keeping in view the guiding principles of comprehensive coverage and testing for desirable objectives.

### School Records and Internal Marks

While a reform of external examinations on lines indicated above will be a powerful factor in correcting a great part of the present imbalance, it is not by itself enough. The new examination will still be measuring the attainments of pupils at a particular point of time rather than their work over a period of years, possibly leading to poor habits of work and study as well as operation of chance factors on final results. This calls for giving due importance to year round work and internal marks. Another more fundamental reason for internal marks is provided by the fact that not all objectives of teaching any school subject are capable of being tested by means of paper-pencil (written) tests. Thus, the ability to speak a language, the ability to understand spoken language and developing interest in literature are some objectives of teaching mother tongue which cannot be so tested but which must get due recognition. While in order to inculcate regular work habits and to guard against the operation of chance elements at the time of external examinations, these objectives may be given some weight in school records and internal marks, their essential purpose should be to test and assess the pupils on those objectives which cannot be tested in written external tests. Examination or Secondary education boards can, on the basis of objectives worked out by committees of experts mentioned above, specify to teachers what aspects viz. mainly those not tested by written examinations should be covered by school marks. It is, however, not enough merely to ask teachers to provide evidence on the attainment of certain objectives. It would be necessary to bring them together in groups to discuss ways and means of getting evidence on these objectives. A teacher may, for instance, feel utterly lost as to how to find out the depth of a pupil's interest in

literature and be forced to make haphazard guesses leading to great subjectivity and even corrupt practices in schools. A discussion of the means of evaluation will, on the other hand, not only lead to more reliable assessments but involving as it will a clearer understanding of the objective concerned, bring about improved teaching and learning.

The reliability of school records and the advisability of adding internal marks to those obtained at external examinations has been a matter of considerable discussion. These involve certain problems of scaling, addition and a form of declaring results discussed below. It will suffice at the moment to add that in addition to specifying objectives and corresponding means of evaluation for awarding internal marks, examination boards could require schools to submit marks at suitable intervals, say every six months, so as to minimise unreliability.

### Addition of Marks and Results

Our present practice is to add up all the marks obtained by a student and to declare him to have passed in the first, second or third division or to have failed

	A	B
English	50	55
Maths.	75	50
Hindi	40	75
Social Studies	45	60
Science	75	45
Total	285	285

in accordance with the aggregate percentage of marks obtained by him. Marks are supplied on request and, in some states, automatically now. But divisions or aggregates which are still the most widely accepted sources of information about a candidate's attainment would place two students A and B whose marks are as in the table on the left at the same level even though their abilities or potentialities can be seen to be widely divergent. While A would profit best from a course in science or engineering, B might well take to a career in humanities. Aggregates conceal meaningful informa-

tion and equate people on unequal things. There is no reason why we should not dispense altogether with overall divisions or aggregate scores. Certificates given by examining boards could well carry a small transcript of the separate marks obtained by pupils and no overall divisions at all. This would only mean that there would be no first class—a symbol of predicted high success in all directions—and no third class indicating a predicted near failure in all pursuits. In other words a pupil would be known for his specific limitations as well as for the specific field where he has a potential of making good.

The practice of addition involves another fallacy too, which is, that marks in different subjects really mean equal units of attainment and can, therefore, in fairness be added. It is, however, well known that the averages as well as ranges of marks obtained in some subjects are very different from those in some others. Thus

	A	B	a difference of one mark in one subject does not represent the same difference of ability as that in another subject.
Hindi	40	65	Let us take an imaginary extreme case of two pupils A and B, the former a top student of mathematics but poor in Hindi and the latter a top student in Hindi but way down in mathematics. In view of the fact, however, that marks in mathematics differentiate very sharply (range of marks 60) and those in Hindi do not, A's total marks come out to be much more than B's—a result not very much to be expected as each was a top student in one subject and poor in the other. It would thus appear that in adding marks we are following a questionable procedure unless the averages and dispersions of marks in different fields were the same. Indeed, this raises the question whether it would be fair to state those marks even separately. Would it not be fairer to reduce all these marks in separate subjects to a common scale (with a common average and a common dispersion) or, in the alternative, state marks in terms of relative standing vis-a-vis the group viz. percentile ranks? Both
Maths.	90	30	

these involve however considerable clerical labour. Failing such rectification, it would be both theoretically correct and practically useful to leave marks in individual subjects as they are and not add them up to an aggregate or a division.

It might be useful here to consider the questions—(a) whether or not to add internal marks to those obtained in external examinations and (b) how to minimise if not eliminate inter-school variations in internal assessments if the addition is to take place. There is much to be said for the practice of stating internal and external marks in each subject side by side without adding them. If the two sets of marks go to the public side by side on the same sheet, schools will tend to be more responsible in the award of marks for they would not like their awards to be very different from those of external examinations. At the same time anyone wanting to compare the total attainments of pupils in any school subject could always add the internal and external marks (whatever be the validity of such a procedure). It is argued, on the other hand, that internal marks would carry no prestige and, therefore, no effective weight in practice unless they were added to external marks to make up a single score. I am inclined to the former view. But whatever course might be adopted, it would be necessary to ensure broadly similar means and distributions in all schools as between internal and external marks. One practice which has been recommended is proportionately to scale up or down the internal marks awarded by any school which awards to its pupils marks averaging more than 10% above or below their mean performance at the external examination in the same subject. This certainly ensures that schools do not run away with internal assessment provided the external examination itself is a reliable instrument. It keeps inter-school variations within reasonable range. Schools could further be guided in the matter of differentiating as between able and less able pupils by informing them each year of the means and distributions in external

examinations in different subjects in the past year. They would then have greater confidence in giving high as well as low marks and not tamely follow the safe path of awarding everybody nearly average marks on internal assessment. It may be added here that it should not be the purpose of these measures either to ensure that pupils scoring highly on internal assessment should do equally well on external examination or to inhibit schools from differentiating more or less widely as between able and poor pupils than the external test. They are only to make the two sets broadly comparable and, if add we must, more nearly addible.

### Other Educational Outcomes

The foregoing considerations apply to attainments in school subjects and point towards ways in which these can be measured in their entirety and represented most meaningfully and usefully. Education has, however, a rather broader connotation and life calls for growth in other directions too than those which even the most comprehensive understanding of attainments in the direction of the objectives of different school subjects would indicate. A statement of the outcomes of a pupil's school education which is what examination results and certificates and diplomas today claim to be world neither be complete nor completely useful if it made no reference to qualities such as persistence, initiative, sociability, physical prowess and other special traits and aptitudes. Many of these would be of crucial importance for success in one or other walk of life. These are, however, neither capable of quantitative expression in terms of marks nor addible which their

qualification would tend to indicate. Nor are these of use to everybody who happens to see a pupil's diploma or certificate. These would best be recorded on the pupil's cumulative record maintained at the school and filled in after consultation among all the teachers involved at suitable intervals. In order to minimise unnecessary routine clerical work and in order to lend greater meaning and importance to the entries made, the record should ignore traits where the pupil had average standing and indicate standing only on traits where he deviated from average as also any special qualities and attainments not normally recorded. The diploma or certificate could only state that a report on these traits and qualities of the pupil could be made available by the school on request. Not strictly within the purview of examination results, such a transcript of pupils' record would give valuable information which today is either not given at all or given inaccurately or unreliably in the form of open testimonials issued by headmasters to pupils whom they might have known slightly or not at all.

The foregoing views on reform in examinations and certification are based on the assumption that these exercise a powerful influence on the processes of teaching and learning. As constituted today they inhibit the realisation of the most desirable objectives of school education. They are capable of reform in a manner so as to promote rather than inhibit these objectives. However, they constitute only one of the many, though presumably the most important means to reform.

A teacher asks : *What is the use of*

# THIS SYSTEM OF INSPECTION?

If we teachers were asked whether the present system of inspection, which means occasional visits to schools by inspectors, should continue or not, I do not think there can be any doubt as to what our answer would be. It will be a great relief to us if the present system were ended as speedily as possible. This is perhaps a sad commentary on the system but while it exists unchanged, how else, in the name of honesty, can we react to it ?

What is the purpose of inspecting schools ? What purpose do present inspections serve ? What ought to be the real purpose before the inspecting authorities ? Is there any way by which the present machinery of inspection can move itself away from its position of stagnation and bring itself more in accord with new modes and ideals of education ? These are questions which must be answered if we are to make any headway towards new goals and ideals.

When we were under training we were often told by our teachers that an ideal inspector should be a guide, friend and philosopher to teachers. We were also told that the machinery for inspecting schools is set up to help raise the 'tone' of the school. We were further told that the educational administrators were aware of the drawbacks of the existing system of inspection and were thinking seriously of changing it.

And yet, when one becomes a teacher and sees that the same state of things continues year after year, is it surprising that a sense of frustration sets in and gradually one begins to lose all one's

enthusiasm about work and faith in the vocation of a teacher ?

## What is wrong ?

The main trouble lies in the administrative machinery which is highly centralised and needs immediate decentralisation of work to enable things to move. The existing system works mechanically and offers no initiative of any kind to those who have to bear the main responsibility of imparting education—I mean the teachers. In the existing order of things the administrators issue a number of directions in the form of circulars and these circulars keep us and the schools in circular motion, that is, we go round and round and always come back to the starting point. The schools have absolutely no latitude to grow, to come into their own, to plan and set out on new ventures.

by

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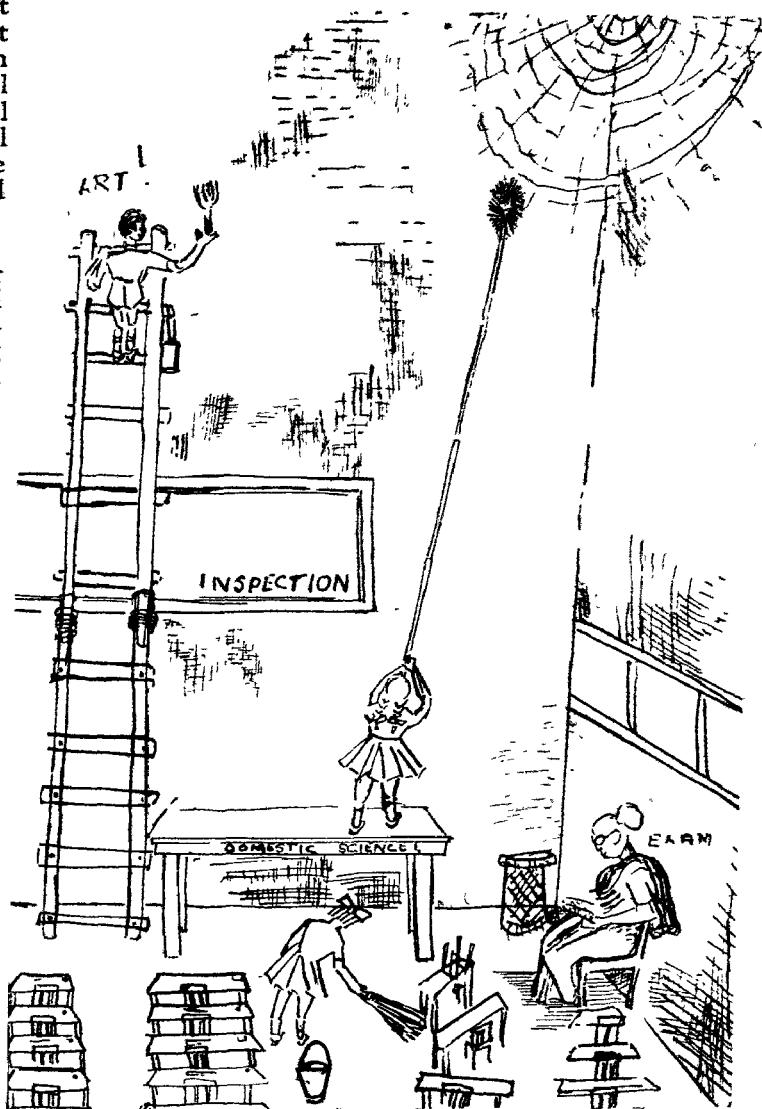
Let me give an example of how the inspection system works. The inspection

for us is an examination and to get through that examination is the chief object we place before ourselves. The moment the school receives an intimation for its annual inspection, its premises begin to hum with artificial activity. The classrooms are swept ; the cobwebs in the corners are removed, the walls are white-washed ; the boards are painted and additional boards which were otherwise left unused are put up at vantage points, eloquent with 'thoughts of the day.' Walls are redecorated with pictures, charts, portraits and other articles. The whole school puts on as it were a new garb to please the officers who have to visit the school. But how long does this

## THIS SYSTEM OF INSPECTION?

atmosphere last? Let the inspectors visit the same school again in disguise and all inanimate things will come to life and tell them the lamentable tale of neglect and indifference.

After the inspector comes to the school the procedure of inspection follows along its rigid path. The inspector observes a few lessons, holds discussions with the headmaster in his office on subjects relating to the administration of the school and at the end of it there is a staff meeting conducted by the inspector where platitudes are spoken and everything is as officious and proper as it can be. This meeting has become rather ceremonial than serious today. Is it any wonder then that the teachers dislike inspections, nor do the inspectors feel at home during these meetings. A complete lack of spontaneity characterises every proceeding.



*"...the premises begin to hum with activity."*

### A new approach is needed

Therefore, I come back to the same question—what is the purpose of inspection? It seems to me that as education is meant to create permanent attitudes of love for knowledge and habits of constant

study in children, so also the purpose of inspection is to create an *esprit de corps* in the school. Such an attitude cannot be created in teachers or headmasters with the help of an inspection report or the threat of a cut in the grant. There is an immediate need to create healthy

and sound relations between the school authorities and the Departments of Education and as a first step towards this end, the inspecting authorities should have a different approach towards schools, or for that matter, to the entire question of education as a whole.

What shape should this new approach take in practice? When inspectors come to the class to see how the teacher is teaching his subject, it is necessary that after the lesson is over the inspector should himself give a demonstration of what an ideal lesson can be. This holds good for both teachers and headmasters. Some argue that to guide teachers in the methods of teaching is the sole responsibility of the head teacher. I do not agree with this view for then the function of the inspectors in this respect becomes restricted, which is to guide headmasters only in their work. But we do not feel that these demonstrations should be confined only to the headmasters. Secondly, an inspector should visit the school oftener and stay longer with the staff for talks and frank discussions. This will automatically create a new and refreshing relationship between the inspectors and the teachers. The inspector will then become a friend and philosopher to the teachers and his visit to the school will be warmly welcomed by the teaching staff. A sense of appreciation, readiness to realise the difficulties of the teachers, and resourcefulness and tact on the part of the inspectors would put the teachers on their mettle and the inspector's participation in the discussion of the school's educational activities and projects would turn schools into activity centres.

Thirdly, a frequent change of inspectors can be as bad for a school and as harmful to its efficient working as a frequent change of teachers. Therefore, I would say that there should be a more or less permanent team of inspectors who should help draw up plans of educational activities of the schools of their districts and see that they are implemented sincerely. At the beginning of each academic year, teachers from all the



*Files, files, files—and all to be cleared in one day!*

schools in a district should meet for a seminar under the auspices of the District Inspector and his assistants. They should form various committees either according to the subject or according to the nature of activities and these committees should hold a thorough discussion on the projects the different teachers should take up in their respective schools. These seminars should be held at different places each time. After the projects have been discussed, it would be the duty of the teachers to implement them and it would be the duty of the inspectors to keep an eye on the follow-up of these plans and listen to the difficulties or any new problems that may have come up in the course of carrying them out. It is only when the inspectors thus identify themselves with the schools that an inspection of the school can have real meaning.

In addition to being a guide and friend to teachers, the inspectors have also another function to perform—their meetings with the management of the schools. At such meetings it is their responsibility to point out and discuss problems relating to the stability of the staff, the financial position of the school, its various needs such as a site for a school building or a school play-ground,

THIS SYSTEM OF INSPECTION ?

The Inspector's last word to the staff



".....more ceremonial than serious".

bringing the school and the community together, etc. I think of the school as an educational triangle of which the community forms the base and the teaching staff and inspecting authorities its two

sides. Unless all the three hold and work together, the school cannot blossom out into a living organism—a worthy institution responsible for the growth and development of our children.

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'Advice is like snow ; the softer it falls, the longer it dwells upon, and the deeper it sinks into the mind.'

—Coleridge.

# PERSONALITY ASSESSMENT IN SCHOOLS

FOR more than a quarter of a century we are being reminded that our educational system is "examination-bound". The unhealthy effects of examinations have been repeated too often to be recounted again. Educationists have been trying hard to evolve something that could replace the present examination machinery but have not been able to find the answer yet. Research Units have been set up to study the problem and produce a method of evaluation that will be healthy and reliable. These units have only recently been started. We await their inventions and in the meantime wish them well !

Attempts at improving the methods of evaluation are praise-worthy, but it cannot be denied that any new method that is evolved will measure or assess only the scholastic achievement of children. The importance of assessing the qualities of personality of children is not yet recognised. I have always wondered why these qualities are ignored in evaluation. Any school child who carries his progress report card home, carries on it a few remarks about his habits and temperament. But this aspect of the report is completely eliminated from the certificates, degrees and diplomas awarded to students at the end of a Board or University examination. The familiar form of a university degree lays down that Mr. or Miss so and so appeared in such and such an examination, in such and such year, studied such and such subjects and was placed in such and such a division. There is no mention of the fact whether the student was punctual or habitually late, orderly or untidy, sociable or quarrelsome, obedient or defiant, co-operative or egoistic, confident

or nervous, hardworking or easy-going etc. Why is this information withheld from the university degrees and school certificates ? The only reason seems to be that there exists a belief that the division obtained by the candidate in an examination is in some measure indicative of the qualities of his personality. It is unconsciously believed that a good student is a good man and vice-versa. One wishes this assumption was true, but unfortunately it is not. An intellectually brilliant man is not necessarily effective nor is he essentially the type that can deliver the goods. Getting things done fairly, honestly and quickly requires qualities very different from intellectual keenness. The employer would value information about academic success but he would appreciate equally well, if not

by  
Sohan Lall\*

more, estimates of qualities of personality. Further the periodic assessment of qualities of personality in schools would help the teacher in moulding the development of the child. To me, therefore, (and I am not alone in this view) personality evaluation in schools is of fundamental importance.

The question that may perhaps be asked is "How could personality be assessed ?" This is not such a difficult matter as it is supposed to be. Students of psychology have made substantial advances in the methods of personality assessment. It is true that these methods are not hundred per cent correct. They are not perfect. Nothing is. But it is the experience of those who have worked with them that they give considerably reliable information. It would not be improper to utilise them. To wait till these methods are further improved shows a timidity of approach and an ex-

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aggerated love of accuracy. If one waits for perfection there is no progress. It would be wise to begin evaluation of personality as soon as possible and to effect further improvement in the method (if it is needed) while it is being used. After all, that is what is being done with the examination system. When it was introduced by the Chinese no one would have thought it was perfect, yet it was adopted as the best method available. In course of time we found it needed improvement and we are trying to improve it without throwing it out. That is exactly what needs to be done with personality assessment. The sooner we introduce personality evaluation in schools the better it would be for children and society.

Now a word about the method to be used. In the first place we will have to agree upon a list of qualities on which the students will be assessed. This is necessary if we desire the assessment to be clear, definite and comparable. I have mentioned a few qualities above. They are only illustrative and not exhaustive. Some of these may be eliminated and others added. It is a matter of agreement among educationists and others, but the preparation of such a list is absolutely essential before evaluation starts.

The next step would be to define each quality clearly and carefully. If this is not done there is the danger of each term being interpreted by different assessors in different ways. If this happens the assessments will not be comparable. Students would be rated on different qualities, so to speak, and not on the same quality. Clear definitions, therefore, are essential. As an illustration I may mention that I have defined "resourcefulness" as "the capacity to improvise a solution when in a tight corner". This to my mind is a good definition. The word "improvise" indicates that the means available are not what they should be and hence improvisation is necessary. Then again the worker is in a "tight corner". He is under stress, whatever that stress may be. Can he, being under stress, find a solution to a problem when

the means available for the solution are not enough? If he can, he is certainly resourceful. Such definitions for different qualities are essential.

The next step is to evolve life-situations in which these qualities can be exhibited by the students. The examinees are then asked to work in these situations. While working, they show different qualities which can be observed and assessed by the teachers. This stage of assessment involves two important steps —(a) evolving of life situations and (b) training of assessors in observation and interpretation. The first of these is a specialised job which could be left to psychologists. The second is not very time consuming or expensive. Three to four weeks' training would be adequate. To ensure reliability of assessment it will be wise to have two or three assessors and pool their assessments.

There are other methods of assessing personality but I visualise difficulties and complications in introducing them in schools. Hence I advocate the one mentioned above. When introduced, these examinations would be somewhat similar to the practicals of the present examination system. If introduced, they will necessitate considerable reorganisation in the administrative details of the examination machinery. These are, however, matters of detail which can be worked out. There may be difficulties but they will have to be overcome. Once the need of personality assessment in schools is recognised everything else would become easy.

The suggestion may look too ambitious at first sight. It must, however, be remembered that students are already being assessed for personality. Their qualities of "head and heart" are known to teachers. These find expression in testimonials and mutual discussions among teachers concerning students. These assessments are, however, sketchy and not very reliable. What is advocated is to make the method of assessment more systematic, definite and accurate. Such

## SECONDARY EDUCATION

systematic methods of personality evaluation are used with success in different fields of life in the country. It would be unwise to hesitate in introducing them in schools. If the aim of education is the development of personality, it is essential

that personality be assessed. If the disease is not diagnosed, treatment is impossible. We have neglected this aspect of education too long. In all fairness to children this defect should be remedied at the earliest opportunity.

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'Natural gifts without education have more often attained to glory and virtue than education without natural gifts.'

—Cicero

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# A CUMULATIVE RECORD AS A RECORD OF INTERNAL ASSESSMENT

A cumulative record, as every teacher knows, is a record of internal assessment using the term assessment in its widest sense, but not all teachers know the different purposes of internal assessment and the various forms of assessment. They test their pupils from time to time to assess their attainments in the subjects of the curriculum, and records of the marks obtained by the children are generally maintained and sent to the parents. Unfortunately, however, this is often nothing more than a routine practice without any other objective than that of seeking to determine what percentage of marks a child is able to secure in each of the school subjects. If he is unable to secure in a particular subject a certain percentage, which has been arbitrarily determined, he is declared to have "failed to pass" in that subject. Teachers are not always concerned with what this 'failure to pass' means; they are not bothered about the specific weaknesses of a child in the subject in which he has 'failed'; and they are not anxious to discover what are the factors that are responsible for his weaknesses and his 'failure' in that subject.

Tests and examinations have a number of purposes besides that of determining the grades that children can make in the various subjects of the curriculum. The diagnostic purpose is one such important purpose and many teachers tend to ignore it. The guidance function of the teacher is an important function; but guidance needs data on which it can be based. The purpose of a cumulative record is precisely to accumulate data on a

particular child, from year to year, with a view to making it easy for his teachers to understand him, to give him the guidance that he needs and to plan for him an educational programme that will help to develop his potentialities and aptitudes to the greatest possible extent.

It is obvious from the above statement that a cumulative record is a comprehensive record of the total development of the child and not just a record of his scholastic progress. For this reason, therefore, it cannot be just a record of the scores obtained by a child on a number of examinations, tests or quizzes; for there are aspects of development that cannot strictly be measured in quantitative terms—aspects that can be observed rather than tested, that can be described rather than assessed.

E.A. Pires

Principal, Central Institute of Education, Delhi

One reason why educationists have come to look upon cumulative records as important in education is because they give a more complete picture of a child even as far as his purely academic achievements are concerned. They provide not just one snapshot picture of his performance in a single examination, but a chart of his progress based on a large number of such examinations. Such a chart is more likely to indicate the child's weaknesses and strengths than his scores on a single test would do; but what is perhaps even more important is that a system of regular and periodic tests and the maintenance of cumulative records would serve as an incentive to the child to take his studies more seriously and to be more regular at them. When promotion is

based on a single examination and when merit is judged by a single performance, there is an almost inevitable tendency on the part of children, as we know only too well, to be irregular in their studies and to put off effort until a few weeks before the decisive tests are held. For the same reason it is not proper to judge a candidate by his performance only on an external examination which can never be sufficiently comprehensive to assess every aspect of knowledge and which, because it is an external test which is taken by a very large number of candidates and is in the hands of a large number of examiners who have no personal knowledge of the candidates, can never be as reliable as an internal evaluation. Under these circumstances the need to use cumulative records of the child's development to supplement any external assessment by an internal assessment of the child's many-sided growth becomes obvious.

To my mind, the best practice as far as the nature of the certificates given by boards of high or higher secondary school examination is concerned would be to divide the certificate into two parts—one, giving the candidates' marks on the external examination and the other containing not only an internal assessment of his progress and achievement in the various subjects of study but also an account of his special interests and talents and his participation in various co-curricular activities. It is a moot point whether this certificate should also contain personality ratings. Perhaps, these could be better included in a separate testimonial given by the Principal to each student when he leaves the school.

What, then, should be the nature and the contents of the cumulative record if it is to serve the purposes noted above? To begin with, besides the identification data including the child's name, his parents or guardian's name, occupation and address, his date and place of birth, the previous school or schools attended by him and his date of enrolment, there

should be provision for physical data relating to the child's height and weight, to his physical disabilities, if any, to serious illness both while in school and before joining it and to observations by the school medical officer. This assumes that there will be at least an annual medical inspection of all pupils in the school. As a child's physical condition is often a clue to his intellectual and emotional development, the significance of such physical data in the cumulative record will be easily understood. It is not necessary, however, that the cumulative record should carry all the items contained in the annual medical examination report on the child. Only those items that are likely to have a significant bearing on his scholastic progress and his personality development need be included in the cumulative record.

As the home circumstances of the child, specially his position in the family and his relationships with the various members of the family often affect his progress at school, it is useful to obtain such data and record it. The socio-economic status of the family may also be usefully noted. The child's scholastic progress will need to be recorded in some detail, space being provided for each subject and for each branch of the subject. It is not intended, however, that the cumulative record should contain all the marks obtained on all the tests and examinations taken by the child in the course of the year. The averages for the year, expressed in percentages, should suffice. It may be helpful, also, if the teacher of each subject is asked to state his estimate of the child's progress in his subject. Such an estimate may be made on a three-point scale. If the estimates are recorded about the middle of the session and the percentage marks are entered at the end of the session, the two sets of assessments would provide a wider basis for judging the progress of the child.

As regularity of attendance is essential for scholastic progress, and as irregularity of attendance often explains the failure

## A CUMULATIVE RECORD AS A RECORD OF INTERNAL ASSESSMENT

of children in their studies, a place must be found in the cumulative record for this. It may not be enough to record merely the maximum possible attendance and the actual attendance ; it may be more helpful to record also the nature of any long absence as well as the reasons for it.

An important place must be found in the cumulative record for the special interests and talents of the child, including his participation in games, sports and other co-curricular activities. The strength of the interests of the child and the degree of the special talents exhibited by him should be clearly indicated, as also the extent and the quality of his participation in co-curricular activities. If the aim of education is the all-round development of the child, the school should provide a rich programme of co-curricular activities ; and if children are provided with opportunities for participation in such activities, there should be an assessment of such participation. A systematic record of this aspect of the child's life at school can be of great help in guiding him both in the choice of his studies and in the choice of a vocation when he comes to leave school.

As the ultimate objective of education is the integrated development of the child's personality, the teacher must be concerned with helping the child in

achieving a wholesome personality. The cumulative record, if it is to be of help to teachers in understanding the growing and developing personalities of their wards, must include a careful and systematic assessment of such traits of personality, as co-operativeness, courtesy, industry, initiative, integrity, leadership, responsibility, self-confidence and sociability. Of course, it will be difficult to obtain any agreement on the traits to be selected for inclusion in the cumulative record. To make it easy for teachers to assess their pupils on these traits, it will be helpful to provide them with a verbal instead of a numerical three-point scale, as for example, the following scale for the trait of industry :—

1. Industrious even in the face of difficulties ;
2. Industrious till real difficulties come in the way ;
3. Slacker, can only occasionally get through ;

I hope I have succeeded in this brief article to show that a cumulative record, which is a record of internal assessment, must be not only a cumulative but also a comprehensive record of the many-sided development of the school child if it is to be of use to the teacher in guiding his pupil's academic or scholastic career as well as his general personality development.

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"I have no technical and no university education, and have just had to pick up a few things as I went along." —Winston Churchill

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# Ajmer Board Experiment in Objective Tests

*As part of the general effort to improve the examination system, the Ajmer Board is experimenting in the use of objective type questions in examinations. In this note Principal J.M. Gibson of Mayo College, Ajmer, gives a short account of the experiment, confined particularly to Geography with which he has been directly associated.*

Two or three years ago under the inspiration of Dr. Zakir Hussain, who was then Chairman of the Central Board of Secondary Education, Ajmer, members of the Board began to consider setting a certain number of objective type questions in the Board papers. I can only speak for one subject, Geography, for which I drew up examples of about 150 of this type of questions. These were printed and circulated to all schools taking the Board examination and they or similar questions have been used in the last two or three Board examinations for High School Geography.

The pamphlet that was circulated contained these model test questions and asked for comments on them. Very few comments were received from the Schools.

It was pointed out in the Foreword to the pamphlet that the advantages of this type of test were (1) that answers were either right or wrong and there was then no room for subjectivity on the part of the examiners, and so the marks gave a fair comparison of the candidates' knowledge; (2) that the answers were easy to mark. It was also pointed out that the disadvantages of such a test were—(1) that it took a long time and a good deal of trouble to set well; and (2) that it did not test the candidates' power of expression. It was suggested that this should be done by devoting a part of the paper to essay type questions.

It was also pointed out that in a

Geography examination there would have to be exercises on map work, the interpretation of statistics, and graphical representation. Such questions were "objective" in essence but examples of these were not circulated in the pamphlet under discussion. It was suggested that the new type of paper set by the Board should be divided into three parts. (1) Objective type questions to cover the whole syllabus carrying 50% of the marks; (2) Map work and diagrams carrying 25% of the marks; (3) Essay type questions carrying 25% of the marks.

For the Intermediate examination it was suggested that the objective type questions should be more difficult, requiring more detailed knowledge to answer, and that they should only carry perhaps 30% of the marks.

Owing to the uncertainty of the future of the Central Board, its plan to change and improve its examinations has not been fully carried out, but I think I can say that from the experience of setting and correcting one paper containing a number of objective questions that this type of examination is generally satisfactory provided it doesn't carry more than 50% of the marks. One point that has to be borne in mind is that it is a difficult type of examination to set well, and therefore the examiner should be paid a higher fee than if he were asking only 10-20 questions which require an essay type of answer. It is fairly easy to mark

AJMER BOARD EXPERIMENT IN OBJECTIVE TESTS

quickly and accurately. Here are a few of the model test questions circulated to the schools as an example of what we were trying to do.

- (a) The position of Bombay is 17N, 73E and of Calcutta 22N, 88E.  
(i) Which will have its local noon first?  
(ii) After what interval of time will the other have its local noon?  
(iii) What standard time do they both observe?  
(iv) From what meridian is this standard time calculated?
- (b) (i) What sort of moon do we see in the sky when the angle between the moon, the earth and the sun is roughly 90°?  
(ii) When the moon comes directly between the earth and the sun, what sort of an eclipse is there?
- (c) Which of the following does not have a mediterranean type of climate?  
Cape of Good Hope, South-West Australia, San Francisco, New York, Sicily?
- (d) Name the current in the Pacific Ocean which corresponds with the Gulf Stream in the Atlantic.
- (e) From which of the following is oil not extracted: Cotton, cocoanut, groundnut, jute, flax?  
(f) If the R.F. of a map is 1 : 1,000,00 what is the scale in inches to a mile to the nearest mile?  
(g) If a place 3,000 ft. above sea level lies on the 80°F isotherm, what will its actual temperature be?  
(h) Which of the following rivers does not flow into the Bay of Bengal: Tapti, Mahanadi, Godavari, Kistna, Cauvery?  
(i) What is the chief food crop sown about October in the Punjab?  
(j) Name the process by which the lint is separated from the seeds in cotton.  
(k) What important mineral is found in large quantities in the Damodar Valley?  
(l) On which of the following does the Second Five Year Plan lay chief emphasis:  
Education, health, cottage industries, heavy industries, agriculture, communications, insurance, community projects? etc., etc.

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'The better part of every man's education is that which he gives himself.'

—J.R. Lowell

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*This is my approach to*

# TEACHING ENGLISH LITERATURE

*by*

**Shakuntala Bhalla**

(Lawrence School, Lovedale)

*Who, in this article, counters the general belief that the young children are incapable of understanding the classics, whether Indian or foreign, much less capable of appreciating them. She has tried to convince the reader that children are capable of comprehending the Masters through their works, not in retold or abridged versions but in their original form if the teachers teaching the subject adopt the right approach. Here she gives an account of her own experience in this direction and feels that this is the most effective way of curing the children of their habit of reading comics.*

The present article is an outcome of my teaching experience over the past eight years with children of Classes V and VI (age group 8-11) in a residential co-educational school. These are the lowest classes in our Senior School which prepares children for the Senior Cambridge Examination. I take them in English Literature for two consecutive years. In addition to this, I also teach Biographical History to Class V for a year. This duration enables me to know my children fairly well and also to cover a wide range of my subject, apart from the prescribed textbooks. I am fortunate in having the majority of my children from our own Preparatory school which gives them a reasonably good background of English language which is the medium of instruction there for four years.

Like any other teacher of English Literature, I follow a few prescribed textbooks for purposes of examination. The approach, not unfamiliar to my readers, is rather traditional with special emphasis on assessing the pupils' comprehension of the material learnt and the meanings of difficult words occurring in their textbooks. Whenever possible,

opportunities are offered for dramatisation, and in the classes the pupils are encouraged to illustrate the poems and stories they read. Recitation of poems is also encouraged. The use of audio-aids such as the tape-recorder is frequent and recordings of poems are often made. Occasionally the children's illustrations are exhibited in classrooms.

But this is as far as I follow the traditional approach. The rest of my teaching is a distinct departure from the accepted approach.

During the first week I hold group discussions with children on the following questions :

1. What do you understand by English Literature ?
2. What are the aims of studying English Literature ?

The group discussions seem to elicit, among other things, the following main responses from the children .

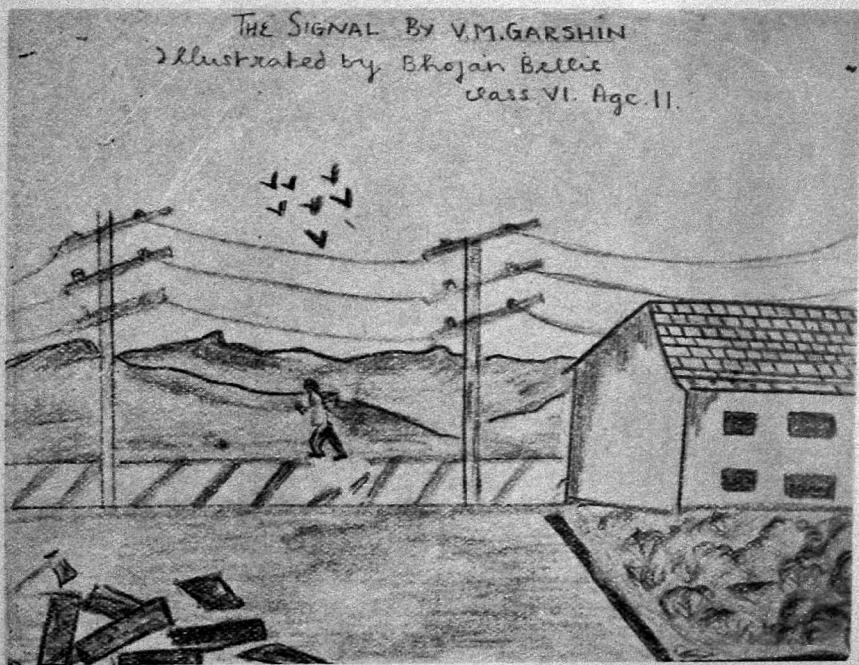
1. That the study of Literature, according to their conception, is limited to textbooks which contain stories or other narrative material, as well as learning a few poems by heart or rendering

them into simple prose stories.

2. That the aims of Literature are mainly to improve one's vocabulary through mastering the difficult words occurring in the textbooks.

Now this conception of Literature is admittedly too restricted and needs to be modified. Accordingly I plan my schedule of work for the following weeks by dividing each week thus—I keep four days of the week for concentrating on prescribed textbooks ; I keep the other two days for general reading.

we go through the books and make a selection of books for our reading. In the beginning I noticed the children selected their books in feverish excitement, rather indiscriminately I'm afraid ! Later, however, they chose them more objectively, either after consulting me or the Librarian regarding the suitability of each book. After this initial selection, the children take these books and read them on their own. This is followed by general discussions in the class in which the children share their reading experience with their classmates by



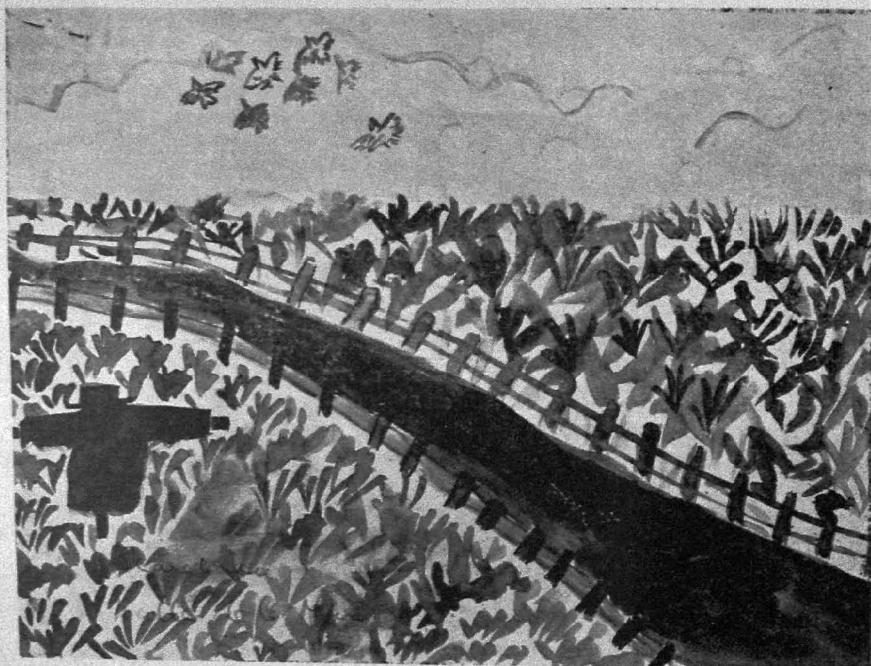
Our school has a well-stocked library which caters to the intellectual, cultural and emotional needs of all age groups in the school. On the days I reserve for general reading I take my pupils to the library at least twice a month. Together

narrating the stories they have read in their library books. In these discussions one child is usually elected to be a chairman and he directs the discussions under my guidance. The children are further encouraged to illustrate the

significant passages through drawings (coloured as well as black and white) on the blackboard. Each reader is asked to give reasons for recommending a particular book to his classmates. Sometimes, to my surprise I find some children discussing the shortcomings of the book! A list of unfamiliar words and phrases is made by each child in his notebook. The children also write about the main

psychological moment. I bring the actual book to the classroom in its original form (neither abridged nor retold) and read it out to the class.

This is how my children are introduced to the great authors. Do not underestimate children; the Masters appeal to them emotionally as well as intellectually. Thus I have read to them Leo Tolstoy



*The Scarecrow* by Walter Delamare—Illustration by a child of class VI, age 11.

characters and events in the book. This is our first step in the direction of inculcating a sound attitude towards the study of literature.

For my part, I watch these discussions keenly and when I feel, through listening to the children's discussions, that they have come to the point where I could introduce my classics, I do so at the right

through God sees the Truth But Waits, The Bear Hunt, The Prisoner of Caucausus and his other works. The students have met Garshin through The Signal, Chekov through The Darling and Puskin through Autumn. The children know Shaw through a few passages from Saint Joan and Arms and the Man. And they are simply delighted with Oscar Wilde through such stories as The Happy

*Prince, The Selfish Giant, The Devoted Friend, The Remarkable Rocket and the Young King.*

But you would ask—how do you know that the children really understand these classics ? Well, it is not difficult to find out whether the children understand or not from their reactions while I am reading to them. The following observation of the children's reactions leads me to believe that the children not only appreciate what they have listened to but also show sound comprehension of it.

1. I deliberately pause in the middle of a story. When they are interested, they are impatient with my pause and request me to go on without wasting another minute. Occasionally my peon enters the classroom on the pretext of giving me a message. When this happens, I have seen children shouting at him to go away immediately. And it has happened several times that even though the class has ended the children have asked me to go on.

2. If a boy or a girl sometimes asks a question in the middle of the reading, he or she is frowned upon by the class and if the same child persists in asking questions, the class peremptorily demands his eviction ! Equally, when the children are not interested, I have found that I do not get this reaction. On the contrary they are only too happy with such interruptions. And then I have to search for something more suitable to their age, aptitude and interest.

3. Their emotional response is evident from their facial expressions. Some of the more sensitive children react with tears or with spontaneous bursts of laughter. Actually, the first time I heard them reproducing phrases from our reading, I was amazed and naturally very happy that these words and phrases had deeply influenced them and become part of their thoughts. This can be a highly rewarding experience for a teacher.

4. Sometimes, to provide a contrast, I read from authors of lesser calibre. On such occasions I have heard their disapproval through comments like : "Please do not read the story. It is babyish!", followed by "Please read us Tolstoy or Oscar Wilde".

5. After listening to these readings, the children on their own go to the library and request the Librarian for the classics. Where the Librarian had seen children clamour for comics before, he is surprised to have them come to him for the great literary works. I also get many requests from children to repeat some old stories because they enjoyed them so much. A great many of them save their pocket money to buy classics for their own private library for the vacation.

From what I have said above, my fundamental premise in so far as the teaching approach to the study of English Literature goes, must now be obvious. And whatever may be the defects of such a subjective attitude, I have no doubt that it introduces vitality into a subject where the study of textbooks alone can at best offer only a limited experience.

# TOWARDS A CITY GUIDANCE SERVICE

The writer of this article, Shri Prayag Mehta is Vocational Guidance Officer at the Jeevanbharati Educational and Vocational Guidance Centre, Surat. Here he gives an account of the efforts made by the Centre to plan a guidance programme that will eventually become a city wide guidance service covering every school and functioning as an integral part of a school's programme of work.

The Jeevanbharati Mandal, an educational organisation, decided in 1954 to organise a Centre for Educational and Vocational Guidance at Surat. The Centre, approved and aided by the Government of India, started functioning in July 1955 with the object of building up guidance as an integral part of the total school programme. It was felt that the Centre should aim not only at the assessment or testing of pupil-abilities but also at their development. In other words, beside working towards adequate educational or curricular growth, it was to actively aim at the development of interests, attitudes and choices. It was also felt that the successful implementation of such a programme would essentially need the active participation of teachers. Therefore, it was decided that the programme should be organised in a way which would ensure the teachers' participation with minimum possible additional work for them.

## The Pilot Programme

For the first two years, the activities of the Centre were mainly confined to classes VII, VIII, X and XI of the Jeevanbharati Secondary School. This is an experimental school where pupils enjoy such benefits as having a school parliament, afternoon tiffin, several co-curricular activities and clubs, and a

by

**Prayag Mehta**

larger pupil-teacher contact than in any ordinary school. The students study in a much freer atmosphere. Some time ago a school guidance committee consisting of teachers concerned with the different subjects, with principal as the chairman, was formed to assist in carrying out the guidance programme which includes occupational information service, collection of pupil-data and maintenance of cumulative record cards, preparation of classroom objective tests, testing and counselling of the backward pupils of class VIII and arranging extra coaching for them and counselling of the pupils of classes VII, X and XI. Visits to places of work, career-films, career-talks by experts and career information library were organised as part of the occupational information service. In the

collection of pupil-data emphasis was placed on the teachers' own observation of pupils and their impressions voted down in the form of anecdotes. Several monographs were prepared to assist teachers in their tasks. Suitable forms were developed for the collection of data. Series of lectures, and periodic staff meetings were organised to keep teachers informed and active in the work. All the pupils of classes VII, X and XI were provided two counselling interviews, one at the beginning of the session and another towards the end. Their school marks were analysed for counselling purposes.

## Evaluation

The experience of the above two-year programme can be summarised as follows :

1. It was felt during counselling interviews that pupils need much more orientation than mere occupational information for the development of proper vocational or educational choices.
2. It appeared that pupils who are better orientated and prepared, need lesser counselling time. They also showed better response to counselling.
3. Inspite of our best efforts, all teachers could not become equally active in the guidance programme. Sometimes it seemed to be nobody's work. The heavy load of work on teachers tends to work as a negative factor in this respect. It was also felt that these teachers who have to perform specific tasks should be trained for the purpose.
4. Collection of anecdotes and observation by teachers did not prove effective. Very few anecdotes were recorded. Teachers complained about lack of time and leisure.
5. Pupils showed interest in counselling particularly that which aimed to improve their attitudes towards studies.

## Beginnings of a City-Wide Guidance Service

After two years of experience and preparation of necessary guidance literature, the Centre was ready to extend the programme to other schools of the city. The Centre had already trained 32 trained graduate teachers as career-masters, in two short courses organised during the first two years (one in each year). It was decided to co-opt 4 secondary schools run by the Sarvajanik Education Society, Surat, in the programme. The programme was launched in September 1957 for Standard X covering about 1,000 pupils.

The programme aimed at two specific

objects—(i) classroom orientation to educate vocational and curricular choice (ii) collection of pupil-data for the maintenance of cumulative record cards. It was intended to be a classroom work. One teacher, preferably a trained career-master, was put in charge of each section of Std. X. An orientation lecture series was arranged for these teachers. Meetings were organised also for the heads of the schools for their orientation.

The orientation programme consisted of 30 teaching periods—15 for talks and the rest for debates, composition work and films. Once a fortnight a member of the staff of the Guidance Centre would visit each participating school to confer with the career-masters and help them by discussing with them their problems and work. Each school organised its own little career corner. The Guidance Centre prepared and constantly supplied the necessary literature to the career-masters at all stages of the programme. The outlines of 15 talks were also prepared and supplied in order to ensure adequate and proper coverage. A two-day career-conference and career exhibition were organised towards the end of the session for the pupils of Std. X of all the schools. As a part of the conference a group guidance forum was arranged to encourage pupils to put questions to various experts who were invited to answer them.

Data about pupils was collected through three forms, one each for pupils, parents and teachers. The teacher-rating form was checked by three teachers for each pupil. This was done to minimise the subjective bias. Each pupil was also given a group test of intelligence. The participating career-masters and teachers were helped continuously through discussions, monographs and lectures to carry out these talks. At the end of the session the teachers concerned sat down to tabulate the data thus collected on the cumulative record cards. The school marks, obtained by the pupils in their first and second term tests along with their I.Q.'s were analysed

at the Guidance Centre. Reports on the achievement and intelligence of each section of the Std. X of every participating school were prepared, containing certain tentative suggestions for improvement and were sent to the respective schools.

### **Experience useful in planning for the next year**

The experience of the work done during 1957 and 1958 proved very useful in planning the programme for the current session. It was seen that teachers who were trained as career-masters did better than other teachers. It was therefore decided that a special training course should be organised to train those teachers of the participating schools who were not trained but were required to work as career-masters in the next (i.e. current) session. Consequently a course was organised in May 1958, and 17 teachers were trained. All were awarded certificates\* by the Bombay Government.

### **The Programme for 1958-59**

Each course has added to our experience and on the basis of the experience of the previous year, the programme was revised this year. At the beginning of the session, a meeting of headmasters was called to approve and finalise the programme. We decided to extend the programme to Std. XI to continue the work with the pupils of the last year's Std. X. The programme was further enlarged to consist of 62 working periods. Out of these, 50 are to be devoted to Std. X and 12 to Std. XI. The number of classroom orientation talks in Std. X was increased to 20. The rest of the periods are to be devoted to debates, composition work, films, visits to places of work, career-exhibitions and brief occupational surveys by pupils. The talks, 32 in all—20 in Std. X and 12 in Std. XI—seek to form a continuous series. The talks in Std. X cover topics mostly about the

employment and occupational structure of the Second Five Year Plan and about study habits and curriculum. The talks in Std. XI largely cover the world of work (see the list of talks at the end of the article). These talks seek not only to inform but also to educate the pupils and assist them to form correct attitudes and choices. The other programme of debates, visits, films etc. is meant to encourage the pupils to participate in the programme actively instead of being mere passive listeners.

Besides the above programme, a curricular orientation programme has been going on for the last three years in Std. VII i.e. the 'delta class' in the Jeevanbharati Secondary School. It consists of 18 curricular and biographical talks, debates and composition work and visits to places of work. The curricular talks inform the pupils about the various courses of studies available after the completion of class VII. The other talks seek to cultivate study habits in pupils. Here also the emphasis is on education rather than on mere information.

The programme regarding the collection of pupil-data is similar to the one carried out in 1957-58, as described above.

### **Teachers must participate**

As I have said before, the emphasis from the very beginning has been to ensure teachers' participation in the school guidance programme so that it should develop as an integral part of the general school programme. The past experience suggests that such an attempt is possible only when the teachers are sufficiently motivated. The most important factor in this respect is the nature and amount of time given to the teachers for this programme. If they are given no time specifically for this work, the programme is bound to prove futile. Even haphazard assigning of periods for guidance work will not help. The manage-

\*The Jeevanbharati Educational and Vocational Guidance Centre is recognised by the Bombay Government for conducting the Career-Masters' Courses.

ments and the heads of the participating schools were wise enough to realise this point. Consequently all the career-masters and other teachers doing this work have been allotted two periods each, per week in the school time-table for this work. Over and above, the principal career-master, who coordinates the work of the other career-masters, and looks after the career corner, has been given two additional periods per week to do this extra work. The arrangement has evoked a better response from the career-masters and hence better working of the programme, although it contains more items than the programme of the past two years.

### **Preparation for Individual Counselling Service**

The school guidance programme briefly described above, works mainly on the group level. It aims specifically at curricular and vocational orientation of pupils and collection of data about them. It can perhaps be termed as a 'Group Counselling Service'. This is sought to be a preparation for individual counselling service. It has been our experience that those pupils who have gone through a good group orientation programme, consume less counselling interview time than others who come sporadically or are referred unprepared to us. The response of the former in the course of counselling is better than the latter's. As a matter of fact, for many pupils the 'group counselling programme' may prove enough to make a correct choice of either a career or a course. In view of these facts it has been decided to give preference to those cases who are referred to the Centre for individual counselling by the school heads or career-masters. Such cases are required to pay Rs. 10/- as counselling fee for one session. How far this is going to work has to be seen.

My purpose in writing this article is to tell that we have made a beginning in the direction of a city-wide guidance service. At present it covers about 2,500 pupils. It is hoped that more schools

would join the programme in future and the Guidance Centre would also expand to cope with the increasing work. All schools which join the scheme contribute a certain amount towards the expenses of the Centre. It is a private organisation and those schools which decide to join the programme do it of their own free will. It is a voluntary co-operative scheme whose success ultimately would depend upon the interest it can arouse in the heads and managements of schools and also in the pupils and their parents.

### **List of classroom Orientation talks in Stds. X and XI**

#### **For Std. X**

1. Need for proper educational and career planning.
2. Know yourself :— Importance and techniques.
3. Factors in S.S.C. Achievement.
4. Study habits.
5. Hobbies and work experience.
6. The importance of Labour ; the new Ideal of our National life.
7. The community project programmes.
8. Steel Plants.
9. Hydro-electric Plants.
10. Plants in Surat District.
11. Industries in Surat District.
12. Employment opportunities under the Second Five Year Plan.
13. Trends of employment under the successive Plans.
14. Occupational Structure of our country.
15. White Collarism :— Shortages of trained personnel.
16. Various subject combinations in XI class.
17. Careers led by the various subject combinations.
18. Concluding talk.

*(Continued on page 46)*

# From Our School Notebook

We publish below accounts of individual projects undertaken by various schools. Contributions (which should be typed) for this feature are invited. These should be addressed to the Editor, "Secondary Education," Ministry of Education, New Delhi.

## I

### **A Pilot Project by G. R. Trivedi, Principal, R.M. Trivedi New Education High School, Ahmedabad.**

IN February, 1958 our school conducted a Pilot Project on 'How we know our time' with students of Class IX A consisting of 45 pupils. The direct stimulus for this project came from our experience that pupils were being given little training in thinking out their problems independently. The record concerning the use of library books indicated that very few pupils were in the habit of supplementing their textbook reading with extra reading from books available in the general library. We also found that where pupils had an urge to know and learn more about a particular topic, they had no idea of what sources of literature to tap. I, therefore, felt that a pilot project on any scientific subject might give sufficient lead in understanding factors which helped towards independent thinking and encouraging pupils to work together.

The main objectives of the project were : (a) to enable pupils to collect independently relevant data about the topic on hand from various sources such as books, magazines, charts and diagrams ; (b) to make pupils understand and analyse some difficult problems relating to the topic ; and (c) to improve pupils' skills such as sketching, drawing figures, collecting relevant information, handling workshop tools and preparing miniature models, practice in the application of the principles learnt and working together in groups.

### **Procedure**

There were 45 pupils which I divided into three groups of 15 pupils each to form experimental groups. Each experimental group was given a part of the main topic. The groups were named A, B and C.

Two teachers were put in charge of group B while groups A and C had only one teacher for each group.

Along with these experimental groups there was a control group of 15 pupils taken from Standard IX B and this group was put in charge of one teacher.

Each group was further divided into batches of two pupils each to work together on the project. Informal communication was allowed since it was impossible to check normal inter-communication among pupils.

### **Methods employed**

In the experimental group, the teacher adopted group discussion method with the idea of giving pupils free scope to think and discuss the problem. He himself presented the broad problem and then allowed a free discussion among his group and guided it where necessary. The group discussed not only the subject they were working on but also the suggestions made by different pupils bearing on the subject. Thus there was a permissive atmosphere to allow the pupils complete freedom in talking and expressing their ideas.

Practical work formed an important

part of the project. As different ideas took shape in the course of discussion, the pupils were made to prepare models and charts giving material form to their ideas. This involved skills like sketching, drawing, carpentry and the use of workshop tools. The pupils were allowed to work in pairs or small groups with a view to encouraging a spirit of team work among them. On the other hand, in the control group, the traditional classroom method which involved formal steps with ready-made teaching aids and materials, was used.

### Time Allotted

This project was carried on for a month and a half in Std. IX A. Twenty per cent of the teaching work of three trained Science teachers and 10 per cent teaching work of a geography teacher was devoted to this project. Five periods of thirty five minutes each per week were assigned for this purpose.

### Criteria used in assessing results

To assess the effectiveness of training the pupils by the new method, the following criteria were employed :

- Number of books and journals referred to by the pupils besides the usual textbooks.
- Attainment in the new type of objective tests framed by Dr. K.G. Desai of the A.G. Teachers College, Ahmedabad.
- Hours spent by the pupils on the project.
- Qualitative observations made by the teachers on suggestions received, initiative shown and the behaviour of pupils in groups.

The following are some of the tentative results and conclusions on the basis of the pilot study undertaken by my school and they should therefore be treated as indicative rather than final.

### Results

The reading habits of the pupils of the

experimental groups were clearly observable. The number of books on general science and journals referred to by each different group during the course of the experiment was —

Group A	15 pupils	1 textbook plus 23 books and journals.
Group B	14 pupils	1 textbook plus 23 books and journals.
Group C	15 pupils	1 textbook plus 20 books and journals.
Control Group	15 pupils	1 textbook plus no book or journal.

These figures show that the pupils of the experimental groups got interested in reading books and journals on general science.

The pupils of all the groups including the control group were administered the same test at the end of the pilot project. The test was assigned 45 marks in all, having one score for each item. The answer papers of all the pupils were assessed accordingly by the same examiner.

The scores of both the control as well as the experimental groups were combined for statistical analysis. The quartile values were worked out for the group as a whole. The whole group was then divided into three grades. Those below the first quartile were given Grade C. Those between the first and the third quartiles were given Grade B. Those above the third quartile were given Grade A.

In the control group, no pupil got grade A, whereas 23 per cent of pupils in the experimental groups secured Grade A.

In the control group 47 per cent of pupils got Grade B, whereas 70 per cent of pupils in the experimental groups secured Grade B.

In the control group, 53 per cent of pupils got grade C, whereas 7 per cent of pupils in the experimental groups secured Grade C.

These statistics show definite improvement in the performance of the class in the experimental groups. The improvement is due to the new methods employed by the teachers in charge of the experimental groups.

The pupils of the experimental groups spent on an average about two hours per week over and above the scheduled hours in the time-table for collecting relevant material and for preparing charts and miniature models. This was arranged at the initiative of the pupils. The control group did not spend any extra time over and above the scheduled hours in the time-table. The pupils in the experimental groups spent a few hours of the night in the school to observe and study the constellations of stars.

Suggestions regarding the type of models to be prepared and the time for meetings after the school hours were made by the experimental groups. No such suggestions were made by the pupils of the control group. This is indicative of the degree of initiative shown by the experimental groups. Differences among the sub-groups were not widely noted.

The pupils of different experimental groups discussed various sub-topics of the project. During the discussions it was noticed that the pupils were eager to contribute, to make suggestions, and to understand the speaker.

Comparing the initiative of the groups A and C with group B, it was found that there was less initiative in the matter of suggestions on the part of the pupils in group B where two teachers were in charge than those of the groups A and C where one teacher was in charge.

### **Conclusions**

- (i) *Observations of pupils' achievements*
- (a) The time spent by the pupils of the experimental groups in reading and referring to useful books and magazines and other material

was more than the time spent by the control group.

- (b) More suggestions and greater participation were received from the pupils of the experimental groups in understanding the problem.
- (c) These pupils' capacity to organise the collected material and to use it for solving problems was noted.
- (d) The pupils were cooperative in their relations with the teachers as well as among themselves.
- (e) The pupils' general achievement, in comparison to the control group was decidedly superior.

#### *(ii) Experiences of the pupils*

- (a) The pupils found their work interesting because they could work at their own pace.
- (b) They found this approach of teaching more helpful in their learning process.
- (c) They found a larger degree of freedom in their work.

#### *(iii) Experiences of teachers in charge of the Pilot Project*

The teachers observed that the pupils had become more regular in their home assignments and in other activities after this method was adopted.

The teachers found that the pupils were greatly interested in this project, even though the time selected was just before the annual examination.

The teachers reported that the pupils had a variety of learning activities which provided a scope for selecting their work according to their aptitudes and abilities e.g. the pupils having good handwriting and who were proficient in art undertook the work of writing and drawing different charts; the pupils having facilities for preparing certain iron spare parts at home undertook the work of preparing miniature models. The carpenter's son having some training of carpentry from his father, helped his group in preparing the wooden parts of different models.

The teachers observed that the group discussion method employed during this project was found to be useful in promoting self-learning and independent thinking. They also expressed the view that the experimental method was effective in developing team-work and free expression of ideas.

The pilot project described above is part of the bigger project called 'Innovations in the teaching techniques of General Science' which has been approved both by the Education Department of the Bombay State and the All-India Council for Secondary Education. This project has been launched in the school this year and it is expected that on the basis of the large-scale trial the school will be in a position towards the end of the year to confirm the usefulness or otherwise of the teaching methods described in the article.

## II

### Promoting a Spirit of Healthy Competition by H.H. Mahapatro, Head Master, Sri Mardaraj High School, Khalikote.

THE reorganisation of Secondary education with its insistence on the need to activise instruction has led the schools to plan a wide variety of curricular and co-curricular activities which can be successfully carried out only if there is whole-hearted cooperation between the teachers and the pupils. In this programme of activities we have to include the observance of almost every festival and to organise the celebration of many social and cultural weeks from time to time. Following the democratic procedure of letting pupils have the maximum freedom in organising things the way they like, we have in our school formed a number of associations and committees for games, scouting, Red Cross, literary and dramatic occasions, school magazine, excursions etc. We have a school union, many student councils, debating and art societies which consist of a majority of student representatives and only a few teachers to help and guide them. But we have found

from our experience over the last three years that though cooperative effort is all very well and does motivate the students to work better, it does not provide sufficient incentive to make them do the best they are capable of. To bring out that response, an element of competition has to be introduced in all school activities. There is indeed no force more compelling than a spirit of competition to make the pupils give of their best.

How do we cultivate this spirit of healthy competition? We do this by instituting prizes for both individual and group excellence in the different items of work which form part of curricular and co-curricular activities of the school. For example, when we celebrated the Independence Day last August, we announced three prizes for three classes that would be judged best in their decoration of the classrooms. This had a remarkable effect on the children. The members of every class went round raising subscriptions for white-washing the classroom and painting the walls with designs. They came early to school and worked after school hours to make their classrooms beautiful with maps, different designs of drawings and paintings, pictures and bunting. These decorations, we found, helped to cultivate in the students not only an aesthetic sense but also an urge for neatness and cleanliness. What is of more direct significance to us, it helped to solve our problem of lack of funds!

A spirit of healthy competition can also cure the habits of irregular attendance among students where all persuasion, intimidation or fining late-comers had failed before. In our school, we present a trophy to the class which scores the highest percentage of attendance marks over a stretch of six months or one year. To win this trophy the students of all classes are eager to come early to school and each class tries to make sure that there are no late-comers in their own group. Similarly with gardening, we have found that the students who did not show any interest in gardening before become keen enthusiasts when the classes are assigned their different plots and we

announce that a prize will be awarded to the students of that class which will show the best results. This method has turned our dry and arid garden into a bright, smiling one with vegetables, flowers and fruits.

To stimulate pupils' interest in their studies, we make them sit in the class in order of merit and also enter their names in the attendance register on the results of each terminal examination. The effect of these methods in awakening and stimulating the different interests of the pupils has been simply marvellous.

Many will perhaps point out that giving so many prizes is going to be a heavy strain on the finances of the school. This will be so if the prizes consist of expensive articles. But our prizes are articles of nominal value and I feel that in course of time we can substitute them with certificates of merit which will serve the same purpose.

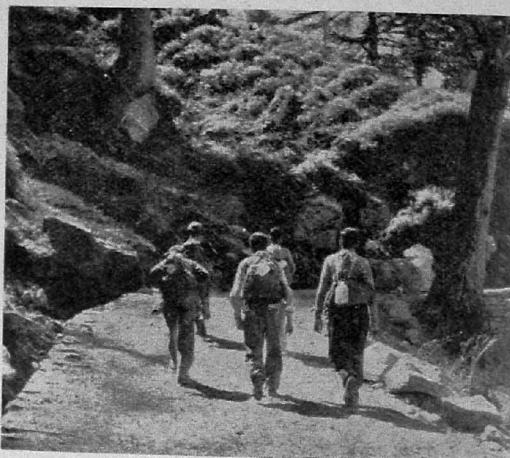
### III

#### **Mountaineering as a Hobby in Schools** by M.N. Tankha, Modern School, New Delhi.

**A**MONG the several hobbies suggested for inclusion in school programmes, few people would seriously think that mountaineering could be suggested as one of them. For mountaineering and climbing icy peaks wearing oxygen masks and with the help of ropes and axes are advance hobbies and everyone cannot do it. It requires a long course of proper training to learn the correct technique and an ideal test for finding out whether a person has an aptitude for even going through such training is to take him first for trekking and hiking at high altitudes.

I for one, however, believe that trekking into mountain regions can be developed as a hobby at the school stage. In fact the school age is the best age for a person to prepare himself for climbing heights and resisting the cold. India with its vast treasure of mountains offers great

opportunities for our young people to venture into this field of adventure. And apart from its adventurous side, this hobby has a distinct educative value for it makes it easy for a student to learn the geography, the geology, the climatology, the customs, the economic conditions and many other things of the regions he visits.



Trekking in the 'Chakrata Hills.'

I have taken many groups of students of my school for treks into the different parts of the Himalayas. From my experience I am mentioning here some of the essentials of such expeditions for the benefit of teachers of other schools who may also like to organise such trips.

#### **Physical Requirements**

It is not necessary that a boy should have a strong physique to join such expeditions. The physical demands are not stereotyped but they are related to the capacity of the boys themselves. I have often found weak-looking boys doing better in this kind of adventure than boys having a strong physique. Moreover, in the case of trekking many boys develop their own capacity to meet hazards and difficulties of all kinds for this type of exercise requires self-discipline.

line, initiative, team-work, a sense of adventure and willingness to take risks.

### Equipment

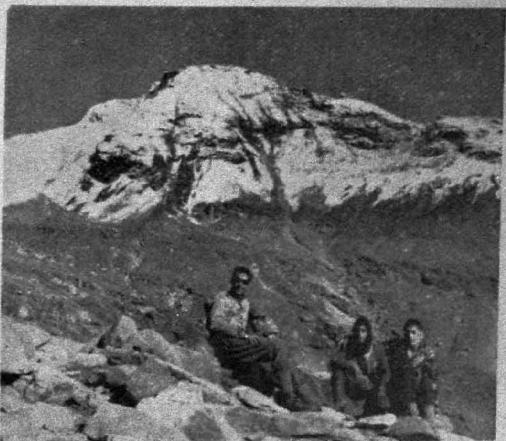
Before starting on the expedition, the leader of the group should plan the probable route and equip themselves with essential things needed on the way. A knowledge of map reading (survey sheets) helps a great deal in such expeditions. For trekking in the Himalayas a person would need the following equipment : 1. Ruck-Sack, 2. Sleeping Bag, 3. Trekking shoes, 4. Stockings, 5. Rope, 6. Water Bottle, 7. Knife, 8. A mug and a plate, 9. Map of the region and 10. A compass.

The first item, namely a Ruck-Sack is a kind of bag made specially for trekking and mountain climbing. It can easily hold all one's clothes and food and can be strapped round the shoulders. A pair of binoculars and a camera are also useful items. For food, it is better to take tinned food which is easier and lighter to carry. It is necessary to take enough woollen clothing.

### Time

The best time for organising these expeditions is either before the rains i.e. May-June or after, that is, in October. In May-June when boys have summer holidays, cross-country expeditions can be organised. Hills at this time of the year are healthier and enjoyable and one can afford to go to long treks, 100 to 200 miles, during the season. In October, however, the trek may not be a long one but boys can climb high altitudes. Heights of twelve to fifteen thousand feet during this season are easily accessible.

In the course of trekking the best time for doing the actual walking is in the early morning because that is more refreshing and less tiring. The route should be planned in such a way that trekking is over before noon and the rest of the day is spent in resting. Complete rest in such treks is essential for regaining



*Resting at the height of 13,000 ft. near 'Rohtang Pass'.*

one's stamina and energy.

### Precautions

While climbing steep heights a person gets exhausted very soon and needs more and more water. But one has to be careful in drinking water straight from the way side springs which seem inviting because this water does not agree with many people. It is therefore advisable to drink this water after boiling it or after treating it with some sterilizing tablets.

Trekking in the Himalayan regions is one of the most exhilarating experiences and when you reach the destination, it seems as if all the glory of the surrounding landscape was there to welcome you. We have stood enchanted in these regions admiring the rugged beauty of the hills, the majesty of early sunrise and the purity of the soft snow flakes around us. We have gazed for hours at the glittering peaks, rushing rivulets, forests of blooming trees and meadows of wild flowers in flaming colours. Trekking and mountaineering are, I feel, the most rewarding hobbies if only because they afford to the trekker a view of infinite charm and beauty of nature.

## IV

**Class Control by H.M. Deb, Head Master, Vidyapith High School, Silchar.**

THE ability to control the class effectively is necessary part of a good teacher's equipment but it is not every teacher who has this ability. I know of many teachers, specially young teachers, just entered the profession who look harrassed and hopelessly bewildered at the end of a long teaching day, complaining that their class consists of unruly children and to manage them is just impossible! I do not think that the task is as impossible as all that. I am here offering some suggestions on how to maintain class control which I hope all teachers, particularly young teachers, will find helpful. These are not infallible maxims but just devices which every individual teacher can modify to suit his own circumstances.

1. **Know your class well**—The first principle that every conscientious teacher should bear in mind is to remember that he should know every pupil of his class by name. The teacher who calls out "you near the door", "second boy from the third row" fails in his very fundamental duty of establishing an identity with the class which is an indispensable condition in maintaining classroom discipline.

2. **Cultivate the power of observation**—The teacher should be mentally alert and should develop a quick perception of the eye and ear. He should be able to see and hear everything that goes on in the classroom. He should always take his position in front of the class so that he has all his pupils in view. This makes the class conscious of his presence. In fact all good discipline depends on whether a teacher has this particular quality or not.

3. **Control by personality**—Personality is a compound of many personal qualities of character such as ability to act and behave with confidence, speak in a natural voice, be an example of decorum

and punctuality etc. A teacher who has developed such a personality will never bully his pupils or threaten them or lose his temper. A reprimand spoken in a quiet but firm tone of voice is enough for the erring pupil. Equally a threat that is not carried out lessens the teacher's prestige and encourages disorder.

4. **Plan your work**—A good teacher must always plan his work in advance so that he teaches with confidence and a certain sense of direction. Good teaching and good order go hand in hand. A class can get completely out of hand if the teacher goes unprepared to the class and starts teaching haphazardly. With previous preparation the teacher can keep his class busy all the time and this, I think, is the best safeguard against truancy. Pupils interested or absorbed in their work are seldom disorderly.

5. **Do not set long assignments**—The teacher should be very particular about setting assignments. Assignments should be such as each pupil can complete within a reasonable time limit and which the teacher can himself examine and correct. He should also make sure that the assignments he sets are done by each pupil of his class. The negligent pupils should always be taken in hand for negligence for carelessness once overlooked usually comes to stay.

6. **Develop a sense of self-discipline among students**—Nothing is more calculated to develop the sense of self-discipline and proper behaviour in students than their enforcement not by an outside authority but by the students themselves. Pupil participation in class government is a practical method in that direction. To be given duties, responsibilities and privileges is the most powerful incentive to pupils to behave well. Therefore a class committee of about 10 elected pupils should be set up to see that proper codes of conduct are observed. They should be entrusted with the duties and responsibilities for classroom discipline, class cleanliness, etc. The committee should work under the guidance of the class teacher.

# Activities at the Centre

## National Awards for Teachers

On January 25, 1959 the Ministry held a special function in Vigyan Bhavan, New Delhi, to honour 32 teachers who received National Awards for their outstanding record of merit and valuable service rendered to the community in their professional life. The Ministry has instituted the awards with the object of raising the prestige of teachers and giving public recognition to their services. Each award consists of a Certificate of Merit and a cash award of the value of Rs. 500/- each. During the first year, that is, 1958, 32 awards were made—2 each for the States, 2 for Delhi and 2 for other Union Territories taken together. To begin with, the Scheme is confined to primary and secondary teachers (16 primary and 16 secondary) but it is proposed that the Scheme should be gradually extended to the University teachers and members of the inspectorate.

The presentation of awards was made by the President, Dr. Rajendra Prasad. Speaking on the occasion, the President said that after the parents and the atmosphere of the home, the biggest influence that moulds a child is that of the school and of the teachers who impart instruction to him. The importance of the teacher in the social setup therefore

and the need to pay him reasonably well is beyond question. But he also appealed to the teachers to do what they could on their part to raise their standing in society. He was of the view that the teachers could bring about a change in their present conditions by improving their general bearing, their qualifications, their attitude towards students and the teaching profession.

In his inaugural address, the Minister of Education, Dr. K.L. Shrimali said that "Ever since independence the Government of India has been exercised about the deterioration of the status of the teacher in the society. The low social and financial status accorded to him is one of the main reasons why young persons of ability and character are not attracted to the profession and why persons of calibre continue to drift away from it." At one time, he pointed out, the teacher in our society held the highest position but centuries of neglect have reduced him to the lowest. The society was prepared to pay high salaries to doctors and engineers but was not prepared to grant even the modest means of livelihood to teachers who are expected to look after our children. "It is our duty to awaken the conscience of the society to provide them with those minimum social and economic conditions without which they cannot discharge their responsibilities effectively" he said.

### *How selection was made*

The Ministry had prepared a selection form in the nature of a questionnaire setting forth the criteria on the basis of which the selection of candidates was to be made. Broadly speaking, any teacher who fulfilled the minimum qualification of 10 years' recognised teaching experience was eligible for the award. The main considerations that were to guide the selection of candidates at various levels were (a) teacher's reputation in the local community, (b) teacher's academic efficiency and the desire for its improvement, (c) teacher's genuine interest in and love for children and (d) teacher's share in social life and activities. The selection form incorporating the above criteria was printed and copies of the form were sent to all State Governments and Union Territories according to their anticipated requirements. As regards the procedure for inviting applications and making selections, the Ministry suggested to the State Governments that the headmasters of the primary and secondary schools may be invited to recommend a suitable name from each school. The preliminary selection of candidates was to be made at the District level and the second selection of candidates at the State level. The final selection of candidates was made by the Central Selection Committee from among the recommendations received from State Governments/Union administrations (6 recommendations from each State and two from each Union territory).

The names of the teachers who were recipients of the National Awards are : Shri V. Narasimham and Shri J. Shaik Abdullah (Andhra Pradesh); Shri Girindra Nath Changkakati and Shri Babula Nath Goswami (Assam); Shri Uma Prasad Sinha and Shri Nand Kishore Lal Srivastava (Bihar); Shri Shankar Keshav Kanetkar and Shri G.G. Patkar (Bombay); Shri Ghulam Mohammad Javid and Shri Dharam Vir (Jammu & Kashmir); Shri Kalandi Shekaran and Shri K. Ryru Nayar (Kerala); Shri Mishri Lal and Shri Sarman Lal

Gautam (Madhya Pradesh); Shri A.M. Kanniappa Mudaliar and Shri P. Padmanabhan (Madras); Shri S.V. Kalmath and Shri B.I. Chengappa (Mysore); Shri Basant Kumar Dass and Shri Lokanatha Nanda (Orissa); Mrs. Veena Manjit Singh and Shri Prakash Chand (Punjab); Shri Jagat Narain Nag and Shri Rajindar Singh (Rajasthan); Shri Sadguru Sharán Awasthi and Shri Har Das Sharma "Shreesh" (Uttar Pradesh); Shri Prabodh Chandra Goswami, and Shri Harendra Kumar Sarkar (West Bengal); Shri Kidar Nath and Shri Tabla Ram Gulati (Delhi); and Shri H. Nabakanta Singh and Shri I. Shanghei (Manipur).

### **The Central Advisory Board of Education**

**THE** 26th meeting of the Central Advisory Board of Education held at Madras from 12th January to 16th January 1959 discussed, among other things, the following topics :

- (1) Measures to be taken to accelerate the pace of conversion of High Schools into Higher Secondary schools on the reorganised pattern.
- (2) Measures to be taken for the training of adequate number of teachers for the new secondary schools.
- (3) The new pattern of Basic Education of the Kerala State.
- (4) The revised scheme of teacher training at Secondary level in Kerala State.
- (5) The place of Sanskrit in the school curriculum.
- (6) Greater coordination among schools, vocational guidance agencies and employing agencies.
- (7) The problem of limiting admission to Universities.
- (8) The question of additional Central assistance beyond the standard rate of 50% to the State Governments on a scale based on the comparative backwardness of the State as revealed from its annual output of matriculates per lakh of population.

## The Central Research Advisory Committee

A meeting of the Central Research Advisory Committee was held on 28th and 29th November 1958 in New Delhi. The Committee recommended the establishment of an All-India Research Council under the chairmanship of the Union Minister of Education to promote and coordinate educational research activity in the country. This Council would control the grant of financial assistance for educational research projects undertaken by various institutions.

The Committee also decided that the Central Bureaus of Educational and Vocational Guidance and Textbook Research should be amalgamated with the Central Institute of Education and made its departments. The reorganised Central Institute of Education should have the following five departments :

1. Department of Teacher Training.
2. Department of Research in Education.
3. Department of Psychology.
4. Department of Textbook Research.
5. Department of Educational and Vocational Guidance.

## Collection of data on Secondary Education

A meeting of the Informal Consultative Committee of the Parliament attached to the Union Ministry of Education, held on 18th September, 1958 decided to collect comprehensive data from the States about the working of the various schemes for the reconstruction of Secondary education in the country, and in particular, for the conversion of existing secondary schools into higher secondary and multipurpose schools.

This data, when collected, is expected to give a complete picture of the working of some of the major reforms being carried out in pursuance of the recommendations of the Secondary Education

Commission, showing, inter alia, the difficulties encountered in the way of the smooth and efficient working of these schemes.

A Questionnaire divided into three parts—Part I dealing with the Physical Statistics, Part II dealing with the Financial Statistics, and Part III dealing with the Qualitative Assessment of the data—has been prepared and sent out for this purpose.

## Central Bureau of Educational and Vocational Guidance

The Central Bureau participated during the quarter in the seminars of the Heads of Higher Secondary Schools on problems of Secondary Education held at Delhi and Jodhpur. The Bureau also participated in two seminars on Guidance in Secondary schools held at Surat and Bangalore.

In these seminars, programmes of vocational orientation of Secondary school leavers, curricular orientation of the "delta" class pupils, and general orientation of the pupils from the "feeder" schools were discussed with the Heads of Institutions with a view to ascertaining whether and how much of the programmes could be introduced in the regular work of the Secondary schools.

The guidance aids and information booklets in use at the Central Bureau were displayed at the "India 1958" Exhibition held in New Delhi from first week of October 1958 to 31st January 1959.

## Research

The Central Bureau held a training session for the officers of the State Governments in the administration of psychological tests which formed part of the selection for Government of India Merit Scholarships in Public schools. Nine officers representing 8 States attended the course.

The Bureau has been working on a scheme of modification of the final interview procedures in respect of children in the 5-8 age group. It is proposed to introduce play activity situations for observation of the behaviour of children of this age group, which will supplement the formal interview procedure.

#### *Employment Counselling*

The Working Group on Vocational Guidance and Employment Counselling held a meeting which was later followed by a joint meeting of the Directors of National Employment Service and the Directors of Educational and Vocational Guidance.

These meetings discussed the manner in which the Directorates of National Employment and Educational & Vocational Guidance could cooperate in programmes of vocational guidance of secondary school students.

The one-session professional training course for counsellors and directors of guidance completed the mid-session evaluation of the performance of the students of the course in theoretical, practical and field work.

#### **Central Institute of Education, Delhi**

##### *Research Projects*

The project on Reading for Pleasure was continued in the seven schools. The result of the work of this session will be presented to the next annual National Conference on Reading likely to be held in May-June, 1959.

A study of achievement in four school subjects (namely Hindi, Arithmetic, Social Studies and General Science) of children in class VI of Basic and Non-Basic schools, is under way and will be completed shortly.

The Institute has made a study of examination marks awarded by the Delhi

University at the M.A. level in various subjects. This study is divided into three parts (a) the distribution of marks in various subjects, their averages and dispersions (b) possible reasons for disparities (c) suggestions for making the awards of marks in different subjects more comparable.

#### *Vocabulary Study*

The vocabulary study is nearing completion. The project on physical causality has gone through the administration stage and the data analysis is in progress.

#### *Child Psychological Service*

Since September last, the Child Psychologist at the Institute has registered eight cases. He also referred five cases which came from Assam, Ootacamund, Basti, Bombay and Banares to other clinics. Out of the eight registered cases three were about a complaint of mental deficiency. After the diagnosis they were sent to the Institute of Occupational Therapy for admission.

#### *Extension Services Department*

Beside the usual study circles and long-term evening courses which are held by the Department, a series of week-end seminars and workshops were organised during the quarter. The total number of participating schools has increased from forty to seventy. As a result of extension work done in schools, there is a growing demand among schools for a course in evaluation techniques for members of their staff.

#### **Central Institute of English, Hyderabad**

In order to promote the teaching of English as a second language, a Central Institute of English has been established at Hyderabad under the control of a Board of Governors. The Institute started functioning from 17th November, 1958.

## ACTIVITIES AT THE CENTRE

### Promotion of Gandhiji's teachings and way of life

A course of lectures by Kumari Manuben Gandhi, grand-niece of Mahatma Gandhi, was arranged in 25 selected schools of Bombay during October 1958.

### New York Herald Tribune Forum

The Government of India has selected Kumari Nalini Nair, a student of pre-University class, Women's College, Trivandrum, as the Indian delegate for this year to the New York Herald Tribune Forum. This Forum is held every year for three months—January to March—

and is represented by a high school student from each country. A number of countries participate.

For selection to the Forum, an essay contest was held by the Government of India through State Governments and Universities on 4th August 1958. From the students recommended by States/Universities a few were invited for an interview before a Selection Committee at New Delhi. The Committee met on 8th November 1958 and selected Kumari Nair to represent the country at the Forum.

### Research in problems connected with Secondary Education

The following institutions were assisted with Central grants for conducting research in problems connected with Secondary Education—

S. No.	Institution	Research Project	Grant sanctioned during 1958-59
1.	St. Xaviers' Institute of Education, Bombay (University of Bombay).	Preparation of Achievement Tests for Standard VII and the Interest Inventory in Marathi.	3,604
2.	M. S. University of Baroda.	Educational and Vocational Guidance ; Construction and Standardisation of Achievement Tests.	23,671
3.	Gujarat Research Society, Bombay.	Construction and Standardisation of Achievement Tests for Children in Secondary Schools—Classes V to VII.	16,100
4.	University of Madras.	Standardisation of Intelligence Tests.	5,169
5.	Sri Ramakrishna Mission Vidyalaya Teachers College, Coimbatore.	A Study of the Socio-Economic Conditions of High School Students in Coimbatore District.	3,375
6.	Radhanath Training College, Cuttack.	Teaching of Science scientifically.	2,400
7.	Dev Samaj College for Women, Ferozepore.	The Utility of the School Broadcast and the Ways and Means to make it more effective.	5,132
8.	B. R. College of Education, Agra.	Construction of Achievement Tests in English and Mathematics.	2,000
9.	Muslim University, Aligarh.	Study of Interest-patterns of Teachers under Training at the Muslim University, Aligarh, via-a-vis the Interest Patterns of Trainees in other Professions.	5,510

SECONDARY EDUCATION

S. No.	Institution	Research Project	Grant sanctioned during 1958-59
			Rs.
10.	Tilak Dhari Training College, Jaunpur.	Common Errors in Written English—their Prevention and Cure.	5,200
11.	University of Allahabad.	A Survey of the Load of Work on Secondary School Teachers.	5,378
12.	D. S. College, Aligarh.	Standardisation of Interest Inventory in Hindi.	3,299
13.	Mahila Vidyalaya Training College, Lucknow.	Study of Causes of Educational Fall off in Classes VI to XII.	2,700
14.	University of Gorakhpur.	A Sample Survey of Mental Ability in Urban and Rural Secondary Schools in Eastern U.P.	2,150
15.	Institute of Education for Women, Calcutta.	Attitude towards Teaching.	4,600

**Assistance to Voluntary Educational Organizations**

The following grants were sanctioned during the period under report :

S. No.	Name of Institution	Amount paid	Purpose
		Rs.	
1.	Ramakrishna Mission Ashram, Calcutta.	70,000	Construction of a Building for Students' Home.
2.	Ramakrishna Mission, Cherrapunji, Assam.	30,000	-do-
3.	C. M. High School for Girls, Poojapura, Trivandrum, Kerala State.	7,500	Construction of a Science Laboratory.
4.	Prayag Sangit Samiti, Allahabad.	1,00,000	Construction of a Building for Prayag Sangit Samiti.
5.	Sri Ramakrishna Mission Sarada Vidyalaya Girls High School, Madras.	12,000	Construction of a Multi-purpose Hall and Purchase of Furniture.
6.	Mahbub College High School, Andhra Pradesh.	6,000	Construction of an Additional Block for High School.
7.	Raisina Bengali Higher Secondary School, New Delhi.	2,820	Educational and Vocational Guidance Unit.

**NEWS AND NOTES**

FROM  
ALL-INDIA COUNCIL FOR  
SECONDARY EDUCATION

*Extension Services*

The Council has approved the inclu-

sion of the Government Training College, Raipur (Madhya Pradesh) in the Extension Services Project. This brings the total number of extension service centres in the second flight to 30.

The Government of Bihar appointed co-ordinators in the following three

## ACTIVITIES AT THE CENTRE

extension centres in the State during the quarter under report:

1. Teachers Training College, Turki
2. Teachers Training College, Ranchi
3. Teachers Training College, Bhagalpur.

Out of the 23 Training Colleges that were included in the first flight of the Project, ten are continuing the Extension Services programme under the revised scheme after completing their first term of three years.

The Extension Services Departments of Secondary Training College, Belgaum, S.M.T.T. College, Kolhapur, and St. Christophers' Training College, Vepery, Madras, organised 'Action Research Workshops' under the guidance of Dr. C. B. Mendelhall, the T.C.M. Consultant attached to the Council.

### *Seminars and Workshops*

#### *Teaching of Foreign languages*

An All-India Seminar on the Teaching of Indian languages was held at the Prantiya Shikshan Mahavidyalaya, Jabalpur, from 6th October to 20th October 1958. Lecturers from Teachers' Colleges from all over India connected with the teaching of Indian Languages were invited to attend the Seminar. The seminar mainly discussed the problems concerning the teaching of Indian languages as mother tongue and as regional or second language.

#### *Headmasters' Seminars*

Seminars for Headmasters and Education Officers were held during the period under review at Delhi (October 9 to 22), Jodhpur (October 12 to 27), Bangalore (October 15 to 29), Jorhat (Assam) (October 25 to November 8), Bhagalpur (Bihar) (October 17 to 31) and Berhampur (West Bengal) (October 30 to November 15).

#### *Subject Teachers Seminars*

Subject-teacher seminars were held during the period under report as follows:

<i>Subject</i>	<i>Venue</i>	<i>Dates</i>
1. Mathematics	Trichur (Kerala)	10th to 19th October, 1958.
2. Geography	Silchar (Assam)	24th October to 2nd November, 1958.
3. English	Patna (Bihar)	25th October to 3rd November, 1958.
4. General Science	Ranchi (Bihar)	25th October to 3rd November, 1958.
5. English	Baroda (Bombay)	31st October to 9th November, 1958.
6. Language	Poona (Bombay)	31st October to 9th November, 1958.
7. General Science	Raipur (M.P.)	26th October to 4th November, 1958.
8. Social Studies	Sardarshahr (Rajasthan)	16th to 25th October, 1958.
9. English	Pillani (Rajasthan)	16th to 25th October, 1958.
10. Hindi	Mathura (U.P.)	26th October to 4th November, 1958.
11. General Science	Gorakhpur (U.P.)	3rd to 12th November, 1958.
12. Home Science	Alipore (West Bengal)	30th October to 8th November, 1958.
13. Biology	Hooghly (West Bengal)	30th October to 8th November, 1958.
14. Mathematics	Gauhati (Assam)	24th October to 2nd November, 1958.

### *Follow-up workshops*

With a view to encouraging the participants of previous Headmasters' Seminars to execute the projects started by them in the schools, two follow-up workshops of four-day duration were held as under :—

Venue	Participating States	Dates
1. Annamalainagar	Andhra Pradesh, Madras, Kerala, Mysore.	9th to 12th October, 1958.
2. Cuttack	Assam, Bihar, Orissa, Tripura, West Bengal.	13th to 16th October, 1958.

### *The Examination Unit*

A conference of the secretaries of the State Boards of Secondary Education was held on the 8th and 9th September 1958 at New Delhi to consider the following :

1. Report of work done and programme of the work of the Examination Unit of the All-India Council for Secondary Education.
2. Planned programme for examination reform at the end of the Secondary school stage.

Dr. K L. Shrimali, Union Minister for Education, inaugurated the conference. Dr. B.S. Bloom, Head of the Board of Examiners at the Chicago University, who was responsible for guiding the team of evaluation officers both in the U.S.A. and in India, explained the work done by the Examination Unit so far.

The Conference was attended by 17 representatives of the Boards of Secondary Education and two representatives of the Punjab University besides other observers.

The Conference adopted the following resolutions :

1. This Conference of Secretaries and Representatives of State Boards of Secondary Education notes with satisfaction the establishment of an Examination Unit in the All-India Council for Secondary Education and the phased programme of examination reform drawn up by the Council which underlines the intimate relationship between educational

objectives, learning experiences, and evaluation procedures. This Conference is of the opinion that State governments, Boards of Secondary education, universities, Secondary training colleges and Secondary schools should extend the maximum possible cooperation to the Council in the implementation of this programme.

2. This Conference recommends that for the implementation of the programme of examination reform, the following steps should be taken by State Governments or Boards of Secondary Education as the case may be :

- (i) Provision should be made for competent teachers in the States to participate in the evaluation workshops organised by the Examination Unit for the production of test materials.
- (ii) Steps should be taken for the incorporation of the new types of questions in the external examinations with reference to selected objectives in different subjects in gradual stages.
- (iii) The schools should be notified in advance about the proposed changes in the external examinations.
- (iv) State Examination Units should be set up as early as possible, preferably before 1961.
- (v) Steps should be taken for the organisation of suitable researches on problems relating to evaluation and curricular constructions.

## ACTIVITIES AT THE CENTRE

3. This Conference recommends that the All-India Council for Secondary Education should :
  - (i) Take necessary steps to produce a large pool of test materials.
  - (ii) Make available the test materials to State Boards of Secondary Education for their use in the external examinations and to the secondary schools for their internal assessment.
  - (iii) Coordinate the research on examinations and curriculum undertaken by the various State Units.
  - (iv) Arrange for the training of additional evaluation personnel to augment the Central Unit and to provide personnel for the State Units.
  - (v) Make available for use by teachers a guide on suggestive learning experiences worked out with the cooperation of University Departments of Education, the training colleges and the subject-committees of Boards of Secondary Education.
4. This Conference recommends that universities and State governments should take steps :
  - (i) To introduce the new concept of evaluation and curriculum construction in their B.Ed. or B.T. courses.
  - (ii) To organise short term courses on Evaluation and Testing procedures in accordance with the new objectives for the benefit of trained teachers.
5. This Conference is of the opinion that in view of the importance of the programmes of the examination reform, it is necessary that representatives of State Boards of Secondary Education and universities conducting Matriculation Examination should meet annually to review the progress made and consider the problems that may arise in the implementation of programmes in different States. This Conference, therefore, recommends that the All-India Council for Secondary Education should make arrangements for such meetings every year.

### *The Evaluation Unit*

The Evaluation Officers of the Council assisted in the evaluation workshops mentioned below which were organised by individual schools during the period under report :

<i>Venue</i>	<i>Dates</i>
1. St. Thomas Girls Higher Secondary School, Reading Road, New Delhi.	3rd to 5th October 1958
2. Lady Irwin Higher Secondary School for Girls, New Delhi.	3rd to 5th October 1958
3. Raiseena Bengali Higher Secondary School, New Delhi.	6th and 7th October 1958
4. R.B. Ramroop Vidyamandir, Subzi Mandi, Delhi.	1st to 15th November 1958

### Other Activities

Science clubs have been established in ninety schools under the 1958-59 scheme during the period under report and a non-recurring grant of Rs. 1200/- has been remitted to each of the schools. Only such schools as were recommended by the Education Department in each State have been considered for inclusion in the scheme.

### T.C.M. Equipment

(i) 28 cases and crates of books, globes, charts and Torso models were sent to Extension Services Department, Government Training College, Raipur.

(ii) 100 crates and gunny packets of Film-Drier and Posters were sent to 52 Extension Service Departments, attached to the Teachers' Colleges in the country.

*(Continued from page 29)*

### For Std. XI

19. Resume of the orientational work done in the previous year(s).
20. S.S.C., What next ?
21. Medicine.
22. Engineering.

23. Agriculture and allied careers.
24. Academic careers - teaching, law journalism etc.
25. Careers in commerce.
26. Fine arts.
27. Careers for non-S.S.C.
28. Choosing a career.
29. Resume of all Talks—discussion.

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'The foundation of every state is the education of its youth.'

—Diogenes

# *Around the States*

## **Andhra Pradesh**

The State Government has sanctioned the conversion of 9 High schools (2 Government and 7 non-Government) into Higher Secondary schools during 1958-59 at an estimated cost of Rs. 90,000/-.

In order to improve the teaching of Hindi in Secondary schools in Telangana area, 90 qualified teachers were appointed in High and Middle-cum-High schools and 50 in Middle schools and Primary-cum-Middle schools. Also, Hindi books were supplied to 211 schools.

During the period under review, 7 new Government Middle schools were opened in Andhra area and 5 New Government Middle schools for girls were opened in Telangana area.

## **Bombay**

### *Secondary Education in greater Bombay*

Some schools in Greater Bombay have introduced new courses and are trying a number of experiments in their schools. The Habib High School, Dongri, has introduced typewriting, textile classes, House system, Safety Cadet Corps and Vocational Guidance and have opened a Milk Centre, School Bank, etc. with a view to offer their pupils opportunities for training in citizenship.

The Fellowship High School, Gowalia Tank, has introduced Fine Arts as an experiment in order to enhance and inculcate general interest in music, dance,

drama and literature. This will help to develop the pupils' integrated personality. The school has been selected as a multi-purpose school for Fine Arts from June, 1959.

The B.P.M. High School, Khar, is an experimental school experimenting in physical education. It trains about 70 pupil-leaders at a time in different types of physical activities for which special classes are conducted. These pupil-leaders then carry on the physical activities for the groups assigned to them and this is a great help to physical education teachers in their work. This school is also conducting an experiment in the assessment of pupils' daily work and assignments. A record of these is maintained and pupils are promoted to higher standards, on the basis of this record, provided they are regular in their attendance also. Examination results are also taken into account but they form only a part of the pupils' total record.

Government Middle School, Parlivaijanath (District Bhir), took up the work of deepening their school well during the summer vacation of 1958. This well was unserviceable in the past for the purpose of watering the school garden. The work was completed in a short time and the well is now 25 feet deep and 22 feet square and can adequately cater to the school garden. The school has now begun to use its waters for growing various food crops such as *moong*, *paddy* and *jawar* in addition to the fruit and vegetables growing in the garden. Nearly one acre of the school land is under cultivation. As a result the school was able to obtain a yield of about 7 *pallas*.

of foodgrains, bringing an income of Rs. 290/- to the school.

## **Delhi**

### *Secondary Education*

In order to meet the problem of admission at the Higher Secondary level during the next session, it is proposed to open 15 Government Higher Secondary schools and upgrade 4 Government Middle schools to the Higher Secondary standard during 1959-60. During the next session 40 High schools are to be converted to Higher Secondary standard.

During the next session i.e. 1959-60, 4 Government High schools will be converted into Multipurpose Higher Secondary schools having facilities for the following groups: Humanities, Science, Agriculture, Commerce and Fine Arts.

### *Payment of salaries to teachers in non-government schools*

In order to eliminate the recurring problem of delayed payment of salaries in the private aided schools of Delhi, which causes considerable hardship to the teachers, the Government of India have taken an important decision to make advance payments of quarterly grants-in-aids to such schools, so that there should be no trouble in future regarding the disbursement of teachers' salaries at the beginning of every month.

When the Government of India examined the problem of delayed payments, they found that some private school managements found it difficult to make regular disbursement of salaries to teachers due to financial difficulties and the shrinkage of source of private philanthropy. The existing practice is to give Government grants to the school managements after the salaries have been disbursed by them. It was found that several private managements did not have adequate funds to meet the

salary bill in full from their own resources first and then claim the grant from the Government. In order to avoid hardship to the teachers and at the same time to render financial relief to the managements, it has now been decided that the school managements would be able to draw the grants-in-aid in quarterly instalments in advance, subject to the fulfilment of certain conditions. The managements will be required to pay the salaries of the teachers within the first week of every month by crossed cheques except in specific cases, such as rural areas, where the Director of Education could permit an alternative mode of payment. All the Heads of schools will also be required to furnish every month to the Director of Education a certificate or such evidence as may be prescribed by the latter to the effect that full payment of salaries to the teachers has been made by the school managements. The Government of India have also directed the Delhi Administration to exercise strict control over the managements of private aided schools and to see that, in future, defaults do not occur in the regular and timely payment of salaries. Institutions indulging in dubious practices will run the risk of their recognition being withdrawn.

To improve the financial position of the teachers in the private schools, the Government of India have further issued orders for raising the employers' rate of provident fund contribution from the existing 6½% to 8½% with effect from the 1st July, 1958. The minimum rate of teachers' contribution to the provident fund has also been raised to 8½%.

### *Seminars and Refresher Courses*

Two refresher courses, one in Chemistry and the other in English were organised during November-December 1958 for English and Chemistry teachers from the Higher Secondary schools in Delhi. Classes were held at the University of Delhi for four weeks. A refresher course is being held for Drawing teachers from High/Higher Secondary schools

## **AROUND THE STATES**

since January, 1959, at Delhi Polytechnic, Delhi.

A Seminar is being organised by Delhi State Post Graduate Teachers' Club in collaboration with the Directorate of Education for Geography teachers from High/Higher Secondary schools during winter vacations. Another seminar for Hindi teachers is being organised by Delhi School Teachers' Association in collaboration with the Directorate of Education. These two Seminars have been sponsored by the All-India Council for Secondary Education.

A Seminar of Heads of High/Higher Secondary schools was organized by the Directorate of Education during the autumn vacations. The participants in the Seminar discussed the problem of how to improve the efficiency of Higher Secondary schools. The specific topics discussed at the Seminar were :

- (a) How to improve day to day teaching in the classroom under existing conditions,
- (b) Double shift problems ; how to improve the quality of instruction in schools running double shifts.
- (c) Parent-teacher cooperation.
- (d) Co-curricular activities in schools.

### *Bharat Darshan tour to Western part of India*

In collaboration with the Directorate of Education, the Delhi School Teachers' Association organised an educational tour during the autumn vacations. A party of about 700 school students and teachers left on the 8th October, 1958 by a special train chartered for the purpose and returned on the 23rd October, 1958.

### *Children's Day Celebrations*

The Children's Day was celebrated on 14th November 1958 at 13 zonal

schools in which school children, teachers and guardians organised some very interesting programmes of games, sports, musical entertainment etc.

### **Laccadive, Minicoy and Amindivi Islands**

The Government of India has approved an expenditure of Rs. 30,000/- for the running and maintenance of a hostel at Elathur for students of the Laccadive, Minicoy and Amindivi Islands. A grant of Rs. 40/- and Rs. 45/- per annum to each of the students of the middle classes and high school classes respectively for books and clothing has also been approved.

Posts of Social Educational Organiser, a Lower Division Clerk (for Central Library) and a Craft Instructor (for experimental basic school at Agathy) have been created for the implementation of the various development schemes of the Islands till the end of the current financial year.

### **Madhya Pradesh**

To reorientate schools in Multipurpose and Higher Secondary syllabus, a Seminar Section is functioning in the Prantiyashikshan Mahavidyalaya, Jabalpur. This Section has greatly accelerated the pace of improvement in the field of Secondary education. The College has published a number of booklets and pamphlets on Secondary education.

The State Government have also opened a new Post-Graduate Basic Training College at Ujjain. Basic Training classes held in the Darbar College, Rewa, have been separated making it a separate Training College altogether. Thus there are 9 full-fledged Government training colleges catering for Secondary school teachers. These colleges are turning out every year 70 Post-Graduate teachers under the M.Ed. Course.

The change-over to the Higher Secondary pattern by the State Govern-

ment has encouraged private enterprise to adopt the same pattern. A number of private institutions have started the Higher Secondary course with the help of an appreciable grant-in-aid from the Government for meeting the extra expenditure. Three Government Higher Secondary schools have been changed into Multipurpose Higher Secondary schools. Now a total of 27 Multipurpose Higher Secondary schools are functioning in the State. Steps are being taken to convert more institutions into the Multipurpose type.

### Madras

#### *Harnessing Community effort for better education*

A short report about the Pilot Project Coordination Scheme of Madras was published in the October 1958 issue of this journal. Its main aim is to harness the goodwill and effort of the people towards helping the common man to take increasing interest in education. Its further object is to convince the public that they need not always depend

on Government authority to implement and develop educational plans but that they utilise their local resources and depend more and more on themselves for providing facilities like school accommodation, playgrounds and equipment.

In order to harness the local resources, it is necessary to have a complete idea of the basic needs of the school in each locality. As already reported in the previous issue, a comprehensive survey of the urgent requirements of the schools is conducted when the people are approached with a request to offer their help. A conference is convened in which heads of schools, Block Development Officers, the staff of the Education Department and members of the public participate. When the needs of each institution are read out, people spontaneously offer donations in cash and kind and promise to undertake improvement schemes like construction of buildings, wells, urinals and latrines, supply of equipment, books and slates, mid-day meals etc. Altogether 19 such conferences had been held till December 22, 1958). Details of 12 conferences held in the last quarter are :

Date	Place	Value of the schemes undertaken for execution	Donations on the spot in cash and kind
30- 8-58	Gangavalli	Rs. 57,500	Rs. 23,000
7-10-58	Athoor	1,49,000	51,300
13-10-58	Virudhunagar	13,78,300	3,21,000
15-10-58	Nattarasankottai	12,55,400	1,44,000
20-10-58	Nazereth	12,62,000	1,01,000
1-11-58	T. Kallupatti	4,66,000	66,000
8-11-58	Dharmapuri	80,900	21,700
16-11-58	Murugur	22,17,000	4,87,400
25-11-58	Ramanathapuram	22,05,800	1,30,400
1-12-58	Tirumangalam	6,27,400	4,50,500
2-12-58	Kelur	4,00,300	1,65,200
22-12-58	Chingleput	23,04,900	11,28,800

The number of institutions benefitted by the 19 conferences was over 2,300. About 11,700 schemes were undertaken for execution and the total cost of all these schemes was Rs.

1,35,55,000. The value of the donations in cash and kind received on the spot was Rs. 33,05,000/- . These figures prove beyond doubt that the people want better education for their children and

are prepared to pay for the necessary facilities to provide such improvements.

provincialised with effect from 1st June, 1958 :—

### Orissa

The Board of Secondary Education, Orissa, introduced the structural syllabus for the teaching of English in Class VII in the Secondary schools of the State beginning with the session 1958-59. (The Syllabus for Class VI was introduced during the session 1957-58).

Three High schools, namely the Ravenshaw Collegiate School at Cuttack, Khallikote Collegiate High School at Berhampur and Government Girls' High School at Puri have been permitted to open Higher Secondary classes during the period

In pursuance of the scheme for the improvement of teaching English in the High schools of the State, the Expert in English visited eight High schools between August and October 1958. He gave demonstration lessons, discussed several questions with the teachers and suggested measures for raising the standard of English.

The Expert in General Science visited nine High schools during the quarter. Teaching of General Science was introduced in Girls' High schools with effect from the current year. In his visits to the schools, he gave demonstration lessons, observed lessons given by the Science teachers and pointed out the merits and defects of the lessons. He also inspected the necessary instruments and apparatus required for the teaching of the subject in each school.

### Punjab

#### *Provincialisation of Local Body Schools*

The following middle schools previously maintained by the local bodies in the erstwhile Pepsu areas have been

1. M.B. Girls Middle School, Maur Mandi (Bhatinda).
2. M.B. Girls Middle School, Rewari (Bhatinda).
3. M.B. Girls Middle School, Charki Dadri (Mohindergarh).
4. M.B. Girls Middle School, Barnala (Sangrur).
5. M.B. Girls Middle School, Budlada (Bhatinda).
6. M.B. Girls Middle School, Safidon (Sangrur).
7. M.B. Girls Middle School, Sanyat (Bhatinda).
8. M.B. Girls Middle School, Jind (Sangrur).

The officials working in these schools will be given the same grades of pay and allowances as are given to their counterparts already in government service. All the Municipal Committees concerned are required to pay every year the amount equivalent to what they provided for education from their own resources in their budgets for the year 1957-58. The Municipal Committees concerned are also required to hand over to Government all the buildings, lands, playgrounds, agricultural farms and furniture etc. in the possession of local body educational institutions in the State.

### Tripura

Tripura Administration has exempted all girl students studying in Primary, Middle and Secondary Schools from the payment of tuition fees.

### West Bengal

*Improvement in the Pay Scales of Teachers*  
The revised pay scale for teachers

## SECONDARY EDUCATION

announced by the Government in February 1958 has been given effect to with retrospective effect from April 1958. The revised pay scale is based on the qualifications of teachers and brings all the assistant teachers of non-government aided schools on par with the assistant teachers of Government schools.

The pay scales of Headmasters have been further revised to Rs 200-10-370-15-400. In addition to their basic pay the Headmasters of High schools (with 10 classes) will draw an allowance of Rs. 25/- p.m. The Headmasters of Higher Secondary schools (with 11 classes, will draw an allowance of Rs. 50-100 depending on the number of courses sanctioned

to each school. The Headmasters of schools having only one course will draw an allowance of Rs. 50/-, with more than one course will draw an allowance of Rs. 75/- and with more than three courses will draw an allowance of Rs. 100/-.

A rural allowance of Rs. 25/- p.m. in lieu of quarters has been sanctioned to M. A., B. T. or B.A. (Honours) B.T. teachers, and an allowance of Rs. 15/- p.m. for the same purpose has been allowed to B.A., B.T. teachers.

Three new B. T. Colleges started functioning during the quarter. These have been set up in accordance with the Scheme for training all existing untrained teachers at Government cost

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'A teacher who can arouse a feeling for one single good action for one single good poem, accomplishes more than he who fills our memory with rows on rows of natural objects, classified with name and form.'

—Goethe

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# Window on the World

## News from Unesco and Abroad

### Britain

*Education for Education's Sake*  
by James Wolfe

**A**N English office clerk and his wife, fired with the idea of bringing education to millions of working people who had no more than elementary schooling, held a formal meeting "of themselves" in 1903 and launched an association to promote the higher education of working men. This organization, later renamed the Workers' Educational Association, today provides higher education for 100,000 people in Britain and has spread throughout the world.

The historic 'meeting of two' elected Albert Mansbridge provisional secretary, and his wife Frances contributed the new association's first annual subscription of 2/6 d from her house-keeping allowance. In 1905, the association became the WEA, and in the same year Mansbridge gave up his job with Co-operative Permanent Building Society to become the first full-time secretary at a salary of £ 1 a week.

The WEA filled an urgent need. At the beginning of this century most working people in Britain had only eight years' schooling, followed by work at the age of 13. Mansfield himself left school at 14 to earn his living. The bulk of such adult education as existed was provided by courses of extension lectures arranged in many towns by the older universities, Oxford and Cambridge, but these attracted mainly the middle classes. Apart from teaching of this kind, learning was largely synonymous with privilege, a training or recreation for those who could afford it.

Mansbridge conceived his association partly as an offshoot of the extension lectures, partly as a reaction against them. The help of the universities would be welcome, but he aimed at education for working people which was not imposed from above, at a democratic movement whose members would choose the subjects they wished to study in co-operation with university teachers. He believed firmly in the virtue of liberal studies for their own sake, and this belief was and still is central to the movement. Education was not to be training for personal success, even in these fields of sociology and politics which have attracted so many WEA pupils, but a way to a wider personal life and a greater contribution to the community.

The first branch of the movement was formed at Reading in 1904; by the next year there were eight, and in 1908 fifty. Mansbridge himself was forced by ill health to resign in 1915, but he later founded, among other bodies, the Australian and Canadian WEAs and was a prominent worker in the field up to his death in 1951.

In 1908 also the form that WEA teaching was to take began to show itself in tutorial classes started at Rochdale, Lancashire, Longton and Staffordshire, by a young Oxford economic historian R. H. Tawney. The three-year tutorial class dominated the movement over the next 30 years, and though today shorter and less exacting courses have been added, it still remains the basic aim. Ideally the class has fifteen to twenty members who choose both the subject they wish to study and their tutor; they pledge themselves to follow the course for the whole three years, and to

keep to the heavy programme of reading and written work.

No national standards are laid down, and there are no examinations, yet many classes, attended in bare schoolrooms after a hard day's work, reach a standard equal to that of a university honours degree. Success is measured by the level of discussion achieved, the extent of private reading, and the papers and essays produced. Often the class becomes a small community in itself, the members and the teacher establishing personal and social contact, working out new ideas and joining in recreational and educational excursions during the summer.

A high proportion of the early pupils were people of great ability who had been denied the opportunity to fulfil themselves, and many of these sought education as a means to achieving social change. Paradoxically much of WEA's fame rests on the rise of such pupils to high office, though this was explicitly not its aim.

The traditional WEA approach to its pupils is as human beings, at whatever level, whose lives may be widened by learning for its own sake. The true "popular university" has room for all who are willing to enter it, and ideally makes no distinction in worth between their purely academic qualities.

The abolermaker whose study of musical appreciation and international affairs leads him to build up a record library and form a greater understanding of the events around him is no less one of WEA's successes than the labourer whose English class leads him to the university course in psychology which helps him with his writing. In an age of greater educational opportunities for children this sort of progress is rarer, but its very rarity highlights the aim of education as leading to purely personal emancipation.

A recent survey of students included a housewife aged 59, formerly a graduate

teacher, for whom the literature class created "a welcome diversion in the life of an elderly housewife". It also included a married woman aged 61 who described herself as "housekeeper, cook, laundress, steamstress, cleaner, boiler-fire lighter, and general mug-about". She had attended school up to the age of 11, and had for the past six years been studying psychology, world history, philosophy and law. Psychology students in the survey included a veterinary surgeon with 6½ years of university studies, and a postman aged 55 who had formerly been a seaman.

At a large London chemical works classes in art appreciation are run for scientists seeking to broaden an outlook confined by early specialisation. Conversely, arts graduates may seek some knowledge of science, for, as C.P. Snow, the novelist, comments, in these days not to know the second law of thermodynamics is not to be educated.

WEA today is based on 21 districts, each having close contacts with a local university. These provide the all-important tutorial classes, but there are many other types. There are week-end weekly and summer schools, organized at the request of trade unions of sometimes employers, classes in prisons and hospitals, courses on English life for immigrants, and many others organized as the need arises.

Nearly half of the classes of all kinds deal with social science subjects, but there is a move away from politics and economics to those giving a new view of man and society, social anthropology, psychology, and social psychology. Literature and appreciation of the arts make up more than a quarter of the total, and physics, the chemistry of everyday life and nutrition are growing in importance.

There have been many changes in the direction of wider and more equitable educational system since Mansbridge's early work, but it is still far from being fully achieved. This, as stated by Professor Tawney, president from 1928-

44, and still a leading figure in the movement after fifty years, is to provide educational opportunities for workers of every kind for long enough and with sufficient continuity "to leave a real mark upon their minds and characters." It is to "the management of affairs by common consent, by argument, discussion, and agreement"—in short democracy—that this education is essential.

(Unesco News)

### *Industry a Partner in British Public School*

An unusual experiment in education is being carried out at Milton Abbey, near Blandford (Dorset), where a public school receives its capital from industry and prepares its pupils mainly for industrial careers

An industrial firm can become a partner in the school by lending it £5,000 interest-free, repayable at five years' notice. In return, the school gives a bursary of £150 a year (nearly half the fees), to be competed for by the sons of the firm's employees. Already banks, engineering companies, and department stores have joined the scheme, and it is hoped that suitable school-leavers will make their careers in a partner firm.

The school, which was founded in 1954, has 200 pupils. Every day they must do their share of the domestic chores, and every Saturday morning they must practice some practical hobby such as boatbuilding or making model aeroplanes. The headmaster is Commander R. H. Hodgkinson, formerly of Gordonstoun, where the Duke of Edinburgh went to school.

(British Information Service News)

### **France**

#### *Night School on TV by Joseph Rovan*

ON certain evenings in the villages of central France or in hamlets high up in Italy's Abruzzi mountains and, thousands of miles away, in the rural commu-

nities of Japan, little groups of people may be seen heading for the local schoolhouse.

These men and women, whatever their language, their costume or the colour of their skin, are united in a common purpose: they are going to school to watch and then comment on television programmes. The idea behind these teleclubs, or collective viewing groups, is to draw some educational and cultural benefit from all kinds of TV broadcasts by encouraging a critical attitude on the part of the viewer.

The first teleclubs were started in France in 1950, and from the beginning the United Nations Educational, Scientific and Cultural Organization realized the possibilities of the experiment and followed its development closely. The Organisation helped to start teleclubs in Italy and Japan, and Unesco publications have kept other countries informed of progress made in these experiments.

In May 1958, French Government, with Unesco's assistance, organized an international meeting to compare results achieved through collaboration between educational and television authorities in nearly thirty countries.

This first international conference, held at the French Institute for Adult Education in Marly-le-Roi, near Paris, drew experts, educators and television technicians from all parts of the world. French and Japanese, Russians and Americans, Rumanians, Spaniards, Yugoslavs, Swedes, Canadians, Poles, Italians, Czechs, Hungarians, Belgians, Germans, Dutch, Australians, Danes, Norwegians, British and Finns together weighed up the increasing importance of their combined efforts for the benefit of education and public information.

Educators, they noted, were often highly suspicious of television and considered it trivolous or even harmful because it was too often directed to providing cheap amusement. Television

authorities, on the other hand, thought they had nothing to learn from educators, "boring, pedantic people who wanted to divert TV from its main function, which is to entertain and amuse". There were a good many stubborn prejudices to be overcome, but the discussions soon showed how much educators had to gain by utilizing so powerful an instrument as television. Similarly, television would be failing in its duty if it neglected the educational aspect of its broadcasts. Delegates stressed that it was possible to instruct while entertaining, and that besides this indirect educational activity, TV network should also include programmes of strictly educational interest on various levels, designed for adults who wished to continue their schooling.

This reconciliation of different viewpoints naturally did not solve all the problems, and individual solutions will have to be sought in each country, adapted to local needs. For example, the same solutions could not be applied in the United States, where there are already a number of stations operating, reserved specifically for educational and cultural programmes, and in a country like Rumania, where television is only just beginning to play a role in the widespread adult education campaign. Nor could the same methods be used in a highly urbanized society such as the United Kingdom where practically everyone can afford to buy a TV set, and in the mountainous rural areas of southern Europe, where the standard of living is relatively low.

For these reasons, participants at the Conference emphasized the importance of taking measures which would promote exchanges of information and of material such as films, programmes specially filmed for TV, and documentation. They felt that both adult education and television stood to gain from regular exchanges of this sort, and a request to Unesco National Commissions and to Unesco itself to encourage such arrangements drew unanimous support.

It was pointed out that, if each TV network produced only one film per year for adult education purposes, suitable for projection in all the participating countries, an enormous reserve of new audio-visual material could be made available. Also, the regular use of educational cinescopes (or films made specially for TV) for non-commercial screening would provide an added source of material for adult education campaigns.

At the close of the conference, members of the various delegations expressed the hope that the meeting might well prove an important step forward in the increasing cooperation between education and the mass media.

(Unesco News)

## Iran

### *Technical Education moves ahead in Iran*

VOCATIONAL training is moving ahead fast in Iran, where the Government has announced that its new five-year programme for technical and industrial education will go into operation this year. New technical schools are to be set up in big provincial centres such as Isfahan, Meched, Qazvine, Rechte, Yazde and Shiraz, while two training centres (one for girls, the other for boys) are to be established shortly in Teheran. Techniques taught in these schools will include mechanics, foundry, soldering, cabinet-making, spinning, weaving, shoemaking, etc. Students who have taken a three-year course in these schools can continue their studies at one of the special technical institutes which are also to be created under the five-year programme.

(Unesco News)

## Israel

### *Education in Israel by Pierre Vernier*

FEW countries have had to face educational problems of such vast proportion as those that have confronted the State of Israel in the last ten years. In 1948 the school population of Israel

numbered some 100,000. Today there are over 500,000 school children and students, whose families have come from 60 different countries, who use more than 70 languages and who have ways of life and thought as varied as their tongues.

The measures taken to establish the educational system of this country have been the subject of a study published by Unesco under the title of "Education in Israel" in a recent number of "Education Abstracts". The study which has been written by Mr. M. Avidot, Director General of the Ministry of Education of Israel, is accompanied by an extensive bibliography.

Reviewing "ten years' effort" in the field of education Mr. Avidot points out that the salient factor in education in Israel is that "The school population has increased five-fold during this period, although the general population has barely tripled itself. This brought in its train serious problems of finding both buildings and materials. However although at the beginning the situation was difficult, in the last two or three years it has improved considerably, each new village or community having a school of its own, even if only a modest one."

Another acute problem was the shortage of teachers whose numbers increased from 5,000 in 1948 to 20,000 in 1958.

During this period two major laws were passed affecting education. The first, in 1949, made school attendance compulsory for all children between the ages of 5 and 11. The second, in 1953, put most schools under State control and regularised the system of education in all schools. The period of compulsory education starts with a year in kindergarten and moves through the elementary schools. The young Israelis then have a choice of three types of secondary education : secondary academic schools under the control of the Ministry of Education and Culture ; secondary agricultural schools under the auspices of the Ministry of Agriculture or secondary trade schools supervised by the

Ministry of Labour. Students continuing their studies can later proceed to one of three fine universities : The Hebrew University in Jerusalem which at the present time has six faculties—arts, sciences, medicine, law, agriculture and social science ; the Israel Institute of Technology in Haifa which concentrates on engineering and the Weizman Institute of Sciences at Rehovot which engages in pure and in some cases, applied research in the exact sciences.

Special schools have been established for young Arabs living in Israel, mainly in the region of Nazareth where 85 percent of the Arab population of the country is concentrated. In these schools the Arab children, Moslem and Christian alike, are taught in Arabic, Hebrew and English being regarded as second languages. The school attendance of the boys is very satisfactory, being over 90% but only 50% of girls between the ages of 6 and 14 attend. Even this figure marks an improvement on the period prior to the creation of the State of Israel.

The most interesting part of the report, however, deals with the assimilation of the immigrants. Coming from 60 countries, they speak more than 70 different languages and dialects and there was a danger at one time that the Hebrew language would be submerged under the influx of the new arrivals—some 700,000 in four years. This did not happen nearly due to two factors—the multiplicity of languages which the immigrants brought with them which forced them to use one, and the rapid absorption of children into schools. In each school the children arrived speaking a dozen or more languages which made them turn quickly to a common language—Hebrew—in order to communicate with each other.

For the Israeli authorities, language is an essential factor in the integration process, and the first objective of the adult education programme, which is highly developed all over the country, is to teach Hebrew to the new arrivals. The

Government, local authorities, labour organisations and various voluntary bodies conduct a number of courses for adults—most outstanding of which are five or six-month intensive courses in Hebrew held in the so-called "Ulpanim".

Though Hebrew constitutes a common denominator of language, the problem still remains to find a common denominator of culture for such a heterogeneous population in such a restricted area, for, if certain immigrants came from extremely advanced countries, others, from the point of view of customs and techniques, have not passed beyond the stage of the Middle Ages.

So adult education aims at giving a basic education to newcomers who have never been to school and at the same time providing general training to people over 16 who seek additional knowledge and skills. Courses have been organised to this end all over the country and at all levels by the Government, by the General Labour Federation and by the Israeli Army which also performs a useful educational function.

To accomplish so difficult a task, the educators and leaders of Israel have used experimental methods and Mr. Avidor notes that they have achieved more successes than failures. This period of ten years has been long enough to show that great progress has been made in raising the cultural level of the new immigrants, particularly of the younger generation, and the results already obtained augur well for the future.

"Education in Isreal" is one of a series of studies and bibliographies published by Unesco on different national systems of education. Studies produced in "Education Abstracts" in 1958 include Education in Belgium; Education in Egypt; In-service teacher training in the United States; Educational information services in the Union of Soviet Republics, and Education in the Belgian Congo.

(Unesco News)

## Japan

### *Improvement of Textbooks and Teaching Materials in Asia*

A meeting of experts to study 'The treatment of the West in textbooks and teaching materials of South and East Asia was organized in Tokyo from 22nd September to 4th October 1958 by Unesco with the cooperation of the Japanese National Commission.

These experts proposed means of international co-operation and exchange between Eastern and Western countries for the improvement of textbooks and other teaching aids and materials, so as to promote mutual understanding of cultural values. They made constructive suggestions for action in the next few years designed to help producers of teaching materials (writers and publishers of textbooks, etc.) in the countries of South and East Asia to supply materials that are technically of good quality, and give as accurate, up-to-date, fair and objective a picture of the West as possible.

About twenty-five educators, invited by the Director-General of Unesco, took part in the meeting. They included specialists representing all the Member States of Unesco in South and East Asia and there were also a few experts from other parts of the world.

The Tokyo meeting made use of studies conducted in some Asian countries on the treatment of the West in Asian textbooks. It did not try to resolve issues raised in the interpretation of certain historical events. Its task was to find ways of serving the major project, which could be realistically adapted to educational conditions and which could help to meet urgent needs in regard to the production of educational materials.

(Unesco News)

## *A School on wheels by Jacqueline Schwab*

The fair which loomed up last night

out of the darkness was a magic world of lights and music smelling faintly of hot coffee.

The booth-keepers were doing their best to attract customers to the gaily-decorated stalls. Children were helping them-round-faced, rosy cheeked children, looking a little pale under the dazzling lights, but proud as punch to be playing their part in the fair. They counted rifle shots at the shooting gallery, handed out rings to throw over bottles, and distributed prizes.

Late hours for children to keep? Yes, but for these youngsters school never starts before 10 a.m. Theirs is a special school created for the children of travelling showmen who spend their life "on the road" travelling from one town to another during the fine season.

Tomorrow, in the grey light of morning, when there are no longer any lights or music and the booths are shuttered up, the school will be waiting for them on the edge of the fair-ground. It is a long coach, spick, span and modern but which still has something of the mystery of the old-fashioned caravan.

In actual fact there are two vans: the teacher's quarters and a trailer which serves as a schoolroom. It is light and airy with desks set out by the windows on either side of a central aisle. All the equipment is brand new, and everywhere there are flowers or potted plants; and of course drawings too, drawings of the fair and the circus animals which are familiar sights for these children. Curtains with a floral design have been fitted to the windows; there is a lamp on each desk and, at the back of the classroom, the teacher's platform and a blackboard. The teacher's wife is busy giving a reading lesson to the smaller children, while her husband at the opposite end of the class calls each child in turn to his desk to explain the lesson and correct mistakes....

Being constantly on the move during

the fine season makes schooling a difficult problem for fair people. Their children attend school regularly during the winter season, but when spring comes their wandering life begins again and they forget most of what they have learned in the various months. The only solution, their parents decided, was a travelling school which could visit them at regular intervals. They drew up plans themselves and had them checked by an architect. They were even prepared to cover all expenses, including the salary of the teacher they had chosen, when the State stepped in and took over the whole scheme. The travelling school is the first of its kind in the Netherlands, and probably in the whole of Europe.

(Unesco News)

## Miscellaneous

### *Longer Playing Records for the Blind*

A project designed to give blind readers handier "talking books" and 10 times as many as they now have by reducing production costs per book, is being investigated by the United States Library of Congress, which is now studying the production of 8-1/3 rpm recordings and record players.

Record players would be smaller, lighter and more durable than present machines, and smaller records could be mailed in less bulky containers. Each book would be recorded on a quarter the number of records, so that for example Ernest Hemingway's *For Whom the Bell Tolls*, which now requires 22 records, could be reduced to 6.

Technical research on the production of the new records and players is being carried out by Recording for the Blind Inc. a non-profit organization in New York City, which will report to the Librarian of Congress on comparative costs and performances of "talking books" at 8-1/3, 16-2/3, and 33-1/3 rpm.

"Talking Books" are at present supplied by the Library of Congress to

some 50,000 sightless readers, who have a choice of about 2,000 titles. The new slower speed would mean that more titles could be made available to meet the increasing demands of blind readers, and popular titles which are no longer available as the records are worn out from repeated use, could be newly recorded.

(Unesco News)

### *Asian Study Kits for United States Schools*

AS part of a programme to encourage study of Asian countries in United States schools, the Asia Society in New York has assembled an experimental packet of teaching materials designed to supplement textbooks and other sources.

Each kit includes 17 photographs of representative Hindu, Buddhist and Moghul art and architecture, a series of "people-and-places" pictures with captions, and pamphlets, reference lists, maps and other audio-visual materials.

(Unesco News)

### *Regional Seminar on Education Reform for South and East Asia*

PLANS to bring out-dated school systems into line with rapidly changing economic, social and political conditions,

were discussed by leading educationists from eighteen Asian nations at a Seminar on Educational Reform for South and East Asia held in New Delhi from August 25 to September 6, 1958. The Seminar which took place under the sponsorship of the United Nations Educational, Scientific and Cultural Organization provided a forum for the exchange of views and experience in building up school systems to meet both the needs of the individual and the demands of the society in which he lived.

The countries invited were : Afghanistan, Burma, Cambodia, Ceylon, China, Indonesia, Iran, Japan, Korea, Laos, Malaya, Nepal, Pakistan, the Philippines, Thailand, Vietnam and the British Borneo Group. India was the host country. Discussions at the seminar were based on and developed from reports on measures of school reform over a 12-year period carried through by the participating countries.

Supplementary to these reports, Unesco Secretariat had prepared a summary on educational advances and reforms made in six countries, representing a variety of systems, outside the Asian area. The countries chosen were : Brazil, France, Italy, Yugoslavia, Sweden and the United Kingdom.

(Unesco News)

'You must have a great devotion to your ideal, devotion not of the moment, but calm, persevering and steady devotion, like that of a *chataka* (a kind of bird) which looks into the sky in the midst of thunder and lightning and would drink no water but from the clouds.'

—Swami Vivekananda



# book reviews



**"The Ascent of History", Book I, The Ancient World, 136 pages ; Book II, The Middle Ages, 164 pages,** by Joseph Segers, S. J. (The Little Flower Press, Calcutta, 1958). Price Rs. 2/- each.

The history syllabus prescribed by the Board of Secondary Education, West Bengal, for the classes VI to VIII has some very encouraging features, even if it borders on the over-ambitious. It seeks to provide for students of the 12-14 age-group a graduated view of human development from the earliest times to the modern period. A continuous history of the world on an elementary level has not been aimed at. Instead, attention is focussed on the crucial epochs in the history of civilisation, with special reference to India, and on certain key-figures whose careers moulded and at the same time reflected the life of their times. To present this complex picture in a way which would be both intelligible and interesting to the very young is no easy task. Father Segers deserves to be congratulated on having succeeded in his attempt remarkably well.

Book I (The Ancient World) in the present series begins the story with the origin of the first men and traces it through the rise of the river valley civilisations, the emergence of the Aryan peoples, the growth of the great religions and the classical ages of China, Greece, Rome and India. Book II (The Middle Ages), beginning with an account of the

Barbarian invasions, goes on to describe the civilisations of mediaeval Bengal, evidently with the object of arousing in the student an awareness of his immediate surroundings set in the perspective of a wider universal past. The emphasis throughout is on the diverse facets of civilization and culture,—specially those which were not only characteristic of particular epochs, but came to be a part of the common heritage of man. Outlines of political history—the rise and fall of empires, conflicts between great powers of the past, chronological details in the lives of great men,—have been brought into the picture only so far as these are essential for providing a framework to the story of civilization. The author has maintained throughout an admirable balance between the narrative and the descriptive aspects and the two together bring into clear focus the continuous flow of human history. The tone adopted is conversational, which is perhaps not so very unusual in a textbook of this type. But what is exceptional is the fact that Father Segers has successfully avoided banality into which this style of writing may easily lead one. The production of the book like its writing shows the same intelligent care and attention to detail. The pictures, for instance, are not collected haphazardly from indifferent books but carefully chosen to supplement or illustrate the text, so that they may vivify the past and evoke curiosity. Questions, exercises, chronological summaries, comparative time charts, notes on vocabulary—all add to

the value of the book. Bibliographies have also been appended, presumably for the use of teachers. There is scope for some improvement here, for the books listed are exclusively secondary works. Some of the great classics and travellers' accounts could be included in the bibliography with suggestions regarding passages illustrative of the text that might be read out and explained to the students.

It is precisely in view of the almost uniformly high standard of these admirable textbooks that one has to point out certain shortcomings. The spelling of oriental names, for instance, does not appear to have followed any consistent or accepted system. For instance, the author writes "Mohammed" for "Muhammad", while "Muharram" is spelt the correct way. The chapters on India also contain certain factual inaccuracies. *Megha Dutta* for instance, (sic) is referred to as a drama (Book I, p.126), the story of Chandragupta's marriage to Seleucus' daughter is accepted as sober history (Book I, p. 88).

A far more serious defect of these books is their unconcealed attempt at introducing doctrinaire anti-rational ideas. Statements such as the following would appear incongruous in any textbook of a secular educational system: "So far, we have spoken of mankind as travelling together. But you may ask, what is the goal?.....All depends on the right answer to the great question. What happens after death?" (Book I, p.3) "It is.....impossible that man, a spiritual creature, should come, just by gradual evolution, from an ape or any other animal. Only a direct intervention of the creator would produce man." (Book I p. 7). Further instances could be quoted. But the above are enough to show how easily any innocent textbook on history can be used to influence young minds in a particular direction. It is one thing to mention the recent modifications of Darwinian theories, another to treat the whole thing as scrapped because it does not fit in with certain theological dogmas. It is unfortunate that a history

textbook of such obvious merit should suffer from this defect because it detracts from the value of an otherwise competent work.

T. Raychaudhuri

\* \* \*

**Better Teacher Education** by E.A. Pires, Principal, Central Institute of Education, Delhi—(University Press, Delhi) Pages 278.

THIS is a collection of articles written and addresses delivered over a period of years by Dr. E.A. Pires on problems relating to the improvement of teacher education in India. Starting with a brief historical sketch on the development of teacher training, the author goes on to discuss in the subsequent chapters the functions of teacher education and the major tasks which face such education in our country today. He makes a broad and comprehensive survey, covering topics such as the teacher's role in the New Education, the place of ideals in the teacher's life, the problems of proper recruitment and selection, the radical reform of the teacher education courses, the necessity of training in guidance and counselling and the significance of the in-service programme of activities. Special sections have been devoted to the recommendations on teacher education made by the University Education Commission, the Secondary Education Commission and the B.Ed. Syllabus Committee appointed in 1957 by the Ministry of Education.

Anybody who is familiar with the work of our teacher education institutions must be aware of the striking defects that characterise the programmes of theoretical and practical training provided by these institutions. The programmes seem to be directed mainly towards equipping the trainees with the necessary skill for effective classroom teaching, with the result that in many cases teacher education has come to mean little more than making the prospective teachers learn a few tricks of the trade

for imparting knowledge to the pupils. In chapter after chapter, Dr. Pires criticises with sincerity and fervour this narrow concept of the functions of the training college, and discusses at length the measures that can be taken to develop among the teachers the insights, attitudes and abilities that will enable them to meet the new demands made on all schools in a young and growing democracy. If there is one reform that is stressed over and over again in the pages of this volume, it is the comprehensive programme of practical training that the author would like to see introduced in the B.T. and B.Ed. courses. Such a programme is expected to comprise, besides the practice of teaching and the observation of a certain number of lessons, the study of different types of schools, participation in and organisation of curricular activities, preparation of a case-study, preparation and use of audio-visual aids, and construction and administration of at least one achievement test.

In a book of this type, you cannot expect a logical development of the theme

from chapter to chapter, and there is bound to be a certain amount of repetition. Nevertheless the matter has been presented in a remarkably coherent and systematic order. The author, who had the opportunity of visiting a number of teacher education institutions in foreign countries, first as a member of the International Team of Experts and again as a member of the Team of Educationists that visited the U.S.S.R. in 1956, has drawn upon his rich and varied experience to pack the pages of the book with interesting and highly instructive information. The style is simple and always lucid, and the valedictory addresses given to the students of the Central Institute of Education make delightful reading.

The book is a useful addition to the somewhat meagre literature available on problems of teacher education institutions in India. It will be of value not only to the students and the staff of our training colleges but also to all those who are interested in improving the quality of the teaching profession.

A.R. Dawood

# To Our Readers

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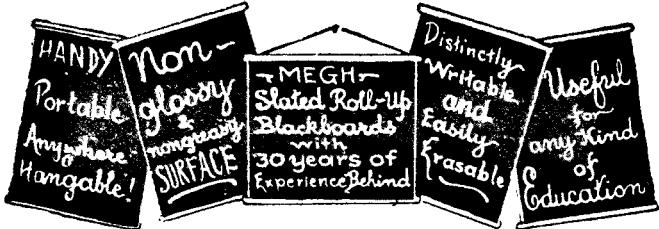
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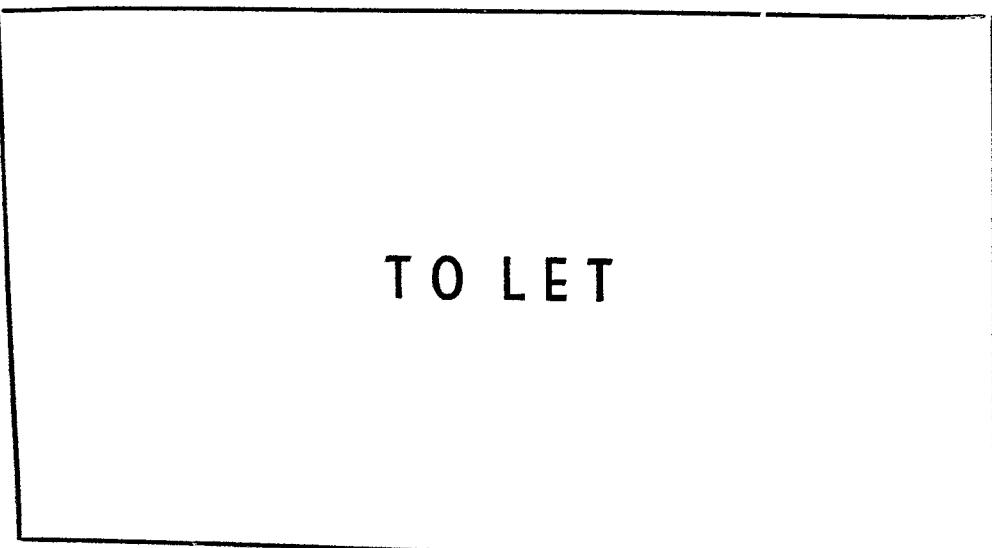
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## *This Issue*

WHY train teachers ? Are trained teachers better than untrained teachers merely by virtue of the training they receive at a training college ? If training of teachers is necessary (as is the consensus of opinion generally), what programme of teacher education should be devised to equip the teacher in the best possible manner for his job ? These and other related questions are posed by many thinking people and it is for this reason that we focus attention on teacher training in this issue. The first two articles raise such pertinent questions as—what is the value and justification of a training college ? Or, what are the essentials of an ideal teacher education programme ? Answers to these questions are not easy to find for an assessment of any aspect of education takes time and is essentially a matter of experimentation.

A new item that will be of considerable interest to our readers in this issue is the letter from a teacher addressed to the educational administrator. The letter is critical of many aspects of the existing educational setup but it is candid and not without self-criticism. If more teachers come forward with a genuine expression of their views about education based on personal experience, we shall be glad to start a regular teachers' diary in this journal.

That originality in instruction is a matter of approach is proven by the writer of "Dramatization in Classroom Teaching" who gives interesting examples of how different subjects can be made to come alive through the medium of drama. The Readers' Forum carries a fourth series of articles on the controversial question—is secondary education primarily a general preparation for life or is it a training ground to prepare a student for an occupation at the end of his secondary school career ? Other items of interest include a short story, accounts of school projects, and a highly instructive article on how to organise and run the school library.

# WHY TRAIN TEACHERS ?

(This is an account of a project planned by David Hare Training College, Calcutta. The project is a comparative study of 'Trained' vs. 'Untrained' teachers in respect of teaching efficiency. In this article Principal D. N. Ray, writes how the idea occurred to them and the lines on which the study is to be conducted).

In our scheme of educational reform there is an ever-growing emphasis on the training of teachers because it is felt that unless the teacher is trained, all our ideas of orienting teaching methods and curricula will not bear much fruit. Indeed the facilities that now exist for teacher training though far from adequate would, by comparison with the facilities available some years ago, show that we have gone a long way in this direction. For example, 50 years ago our training college, the first training college for graduate teachers, named after the great British philanthropist Mr. David Hare, was founded in Bengal. In 1918 the College started with 20 students, now in 1958 its enrolment is 240. As late as 1947 this College was the only Government Training College for graduate teachers in West Bengal. At that time in undivided

Bengal there were 3 non-Government institutions, 2 in Calcutta and 1 at Berhampore in Murshidabad, besides the Teacher Training Department attached to the University of Calcutta. The total number of students in these 5 institutions was not more than 200. Since then the training facilities for graduate teachers, both men and women, have been steadily extended. There are at present 4 Government, 4 Government-sponsored and 5 non-government training institutions including the Vinay Bhavan of the Viswa Bharati University and the Teachers' Training Department of the Calcutta University, catering to the needs of graduate teachers of West Bengal. Of these, as many as 3 (all Government-sponsored) colleges have been opened only this year. The total number of places for admission is now nearly 1500.

By

D.N. Ray

Principal, David Hare Training College,  
Calcutta.

In most of these colleges free tuition is provided, 50% of the students receive monthly stipends of Rs. 50 or Rs. 40. Most of the students are deputed teachers and receive their full salaries and dearness allowances. The West Bengal Government has decided to train all graduate teachers of less than 10 years' experience who are below 50 years of age and working in aided schools.

In other States also similar facilities are being provided. Both the Central and State Governments are spending money on the training of teachers and recently, through the Extension Service Departments attached to 52 Training Colleges or Training Departments attached to the Universities, they are trying to provide in-service training and thereby improve the quality of work in schools.

As an incentive to undergoing training and taking the B.T. or B. Ed. (or L.T. as it is called in some places) degree, trained graduate teachers are being given higher scales of pay and untrained graduate teachers are not even considered for certain posts. In some cases, however, teachers above a certain age with a minimum number of years' experience are exempted from undergoing training and put on the same scale of pay as trained graduates.

Evidently those who insist on training believe that trained teachers are better than untrained teachers.

There are, however, quite a large number of persons, successful in their professions, who were not taught by trained

teachers. They are of the opinion that their untrained teachers were much better than our trained teachers. It is also not uncommon to be told by untrained teachers themselves that they find no special merit in the work of their trained colleagues. In point of fact the recent follow-up study conducted by the Department of Education, Gauhati University, confirms the view held by this group of people that trained teachers in most cases go back to their old practices and show no signs of having benefited in any way from their training. In this connection, I would like to quote an interesting story that I read in an educational journal in December, 1957 of a discussion on this subject among some high level educationists in New Delhi. One of the participants thought that the B. Ed. programme should be for the below average students only. Naturally there were protests from others but the speaker saw no reason to change his opinion and said :

"I should like to see a careful research study in which first class M.A's and B.A's could be permitted to try their hand at teaching without any professional training at all. I believe that an honest, objective study comparing the teaching effectiveness of the experimental groups with that of a representative sampling of M.A.B.T's and B.A.B.T's would support my view that for bright students a so-called professional training is almost a complete waste of time"

"And to whom" asked some one after a brief pause. "would you entrust the task of making this objective comparison ?"

"To the training colleges, of course", was the instant reply !

Well then, about a year back when I visited Delhi to attend the last meeting of the B. Ed. Syllabus Revision Committee, it was suggested in the course of a discussion with a friend of mine, himself an educationist, that a study of trained vs. untrained graduate teachers would be a good project for my college to undertake. My friend slyly hinted that the study would result in a vote

of no confidence on training colleges. I at once took up the idea. A study like this would mean a sort of self-evaluation. Are we, the training college people, delivering the goods ? Is a trained graduate teacher really better than an untrained one ? Is there any justification for putting so much premium on training ? Further, this study, if properly conducted, will indicate the lines on which B.T./B.Ed. curriculum could be improved. If training mainly consists in lectures to be attended and examinations to be passed and that too with the help of 'Made Easies', I concede there will hardly be any difference between trained and untrained teachers.

Therefore, on my return to Calcutta I prepared a scheme in collaboration with two of my colleagues. In planning a project like this, one has to be clear about the definition of a 'good' teacher. It is not enough to say that a trained teacher is better than an untrained teacher. We must know definitely in what respects a trained teacher may be considered to be superior to an untrained one.

A comparative study of this question is closely linked up with another important problem, that of the measurement of teaching efficiency. If we could devise some objective tools for measuring 'teaching efficiency', the task of examining our teacher trainees would be much simpler and our grading much more reliable. I remember the days when the number of candidates was much smaller, say not more than 100 and the examination in practical teaching was conducted by one external examiner and one or more internal examiners according to the number of colleges sending up the candidates, neither the trainees nor their trainers were happy about it. The marking was far from being objective. Now with the increase in the number of candidates (more than 1000 in the B.T. examination of the Calcutta University, this year and the number of external examiners (different for different centres), the problem has become far more difficult. In the present system uniformity of standard is impossible to maintain.

The main idea of the project is to compare the trained and untrained teachers in terms of teaching efficiency. There is no adequate explicit definition of teacher efficiency, but three approaches are apparent in measurement procedures :

- (a) definitions based upon estimates of traits (qualities) assumed to function in the teaching act such as drive, considerateness, emotional stability, objectivity, intelligence and the like.
- (b) definitions based on appraisal of activities included in teaching as discovering and defining pupil needs, setting goals, stimulating interest (pupil activity), choosing learning experiences, guiding learning activities, appraising results, and the like ; and
- (c) definitions derived from measures of pupil growth.

Corresponding to the above three approaches, we have (a) Rating scales ; (b) Tests of teaching ability ; and (c) Tests of pupil achievement.

The project proposed to be taken up by our College has two phases. The first phase will be spread over two years.

In the *first part of the first phase*, we would try to develop or adapt the following tools :

- (a) A Rating scale in respect of an agreed list of traits, qualities ; or characteristics which are considered essential to the successful performance of the teaching act.
- (b) A Teaching Ability Test (if practicable) on the lines of some teaching aptitude tests published in America.

### (c) A Teacher Attitude Inventory.

In the *second part of the first phase*, when the above tools reach a more or less operational stage, an experimental survey will be made of graduate teachers of a number of schools in West Bengal, mainly in Calcutta. They will be rated on a five-point scale of efficiency, the most efficient and the poorest occupying the two extreme points, on the basis of the application of those tools and the judgment of experts.

Attempts will then be made to show how these teachers are distributed in regard to the two categories of "trained" and "untrained". As far as practicable factors like school conditions, academic attainments, teaching experience, age, etc. will be held constant. A further subdivision of trained teachers into those who have passed out from training colleges providing facilities for co-curricular activities and others may be made.

If the results prove encouraging, in the *second phase* of the project which will be taken up in the third year, 'pupil change' may be used as the main criterion for teaching success. After all, schools exist for the sake of children and teaching should be judged by its effects upon children.

We are now about to start on the first phase of the project. Once it gets going, our problems will take definite shapes and will clamour for solution. I have no doubt in my mind that research in this line "will carry us several steps further towards the solution of an exceedingly important and exceedingly difficult problem" (Walker)—the measurement of teaching efficiency and make our faith in a good programme of teacher-education stronger.

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Men are wise in proportion, not to their experience, but to their capacity for experience.

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—G.B. Shaw

# THE ESSENTIALS OF A TEACHER EDUCATION PROGRAMME

A programme of teacher education, like other programmes of professional education such as medical education and engineering education, should be of a sufficiently long duration to turn out teachers who are not only equipped with a knowledge of the technique and methods of teaching but also have a good mastery of the subjects they are going to teach and, what is more important, a type of personality suited for the work of teaching.

One of the difficulties experienced by teachers' colleges today is the lack of adequate mastery of subject-matter by student teachers who come for their professional training with all kinds of academic preparation not at all suited to the needs of the schools where they will be teaching after their training.

Many of them have not pursued more than one of the school subjects up to the required graduate level. Very often they have specialised at the university in subjects like philosophy and political science and have not studied any of the subjects in the school curriculum. For this reason, besides others, I am of the opinion that a three or four-year course of concurrent general and professional education after the higher secondary examination would produce much better teachers than the secondary teachers' colleges are able to turn out with a mere nine months' training after graduation. Today, the vast majority of students, specially the men, who apply for admission to teachers' colleges are persons who have failed to make good in other fields and have turned their attention to teaching as a last resort. A three or four-year course of training after the higher secondary school would bring to the teach-

ers' college students who have a real leaning towards the teaching profession.

The Report of the International Team on Secondary Education has pointed out several advantages of a course of concurrent general and professional education for teachers. To quote from the report : "In the first place, it permits a close integration of the teacher's general education after high school and his professional training ; the study of the subjects in which the teacher is specializing to teach can be approached from the point of view of the actual needs of schools. Secondly, the length of the course gives the teacher training institutions a much longer time to impart to their students an enthusiasm for and a devotion

By

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to the profession. Then, it permits a greater flexibility for spreading out the practical aspects of the training such as child study, observation of teaching and practice teaching. What is perhaps the greatest advantage of this system is that it gives plenty of time for the student to decide whether he or she is really fitted for teaching. It also makes it easy for the teacher educator to plan a systematic programme of guidance and counselling with a view to encouraging and helping those students who have the potentialities of a good teacher and discouraging those who are lacking in such potentialities."

Another point on which I feel very strongly is about making teachers' colleges fully residential. The Secondary Education Commission has emphasized the need to make teachers' colleges residential and has indicated one important advantage that such colleges have over the non-residential

colleges, namely, the possibility of an ampler and richer provision of co-curricular activities and opportunities for community service. To this advantage may also be added the greater possibility in residential institutions of a closer personal relationship between the faculty and the students, specially if provision is made for all members of the faculty to reside on the premises of the college. I am, therefore, all in favour of making our teacher education institutions residential.

Another matter which affects the quality of the training given to prospective teachers is the system of external examinations that is still in vogue today in this country. I am of the opinion that our teachers' colleges would be able to do a much better job of teacher education if the final assessment of their students was left entirely to them. Today, the training given tends to be very largely circumscribed by the courses of studies prescribed by the university and by the external examination which comes at the end of the training. There may be no harm in teachers' colleges having to conform to certain standards of attainment both in the theoretical studies and in the practical aspects of training; but they should have sufficient freedom to modify and adapt the training from time to time to the special needs of their students and of the schools where they will teach after graduation. The present system of external examinations does not permit such adaptation. I also feel that in the assessment of student teachers there should be as much weightage given to the practical aspects of the course as to the theoretical aspects, which is not the practice today in the vast majority of our teachers' colleges.

I shall now try to discuss the nature of the programme of teacher education against the important objectives of such a programme.

The first objective of teacher education should be the promotion of sound physical health among the student teachers and a keen awareness of the principles of health education. To ensure the good health of a teacher trainee it is necessary that there should be a rigorous physical check-

up at the time of admission followed by periodical medical examinations. The college should provide a rich and varied programme of physical education and games to ensure the physical fitness of the student teachers during their period of training. This programme should be suited to the needs of individual students with varying physical abilities. This is one of the areas of teacher education which can be better provided for in a residential institution than in a day-training college. As the students will have to be concerned, when they become teachers, with the physical development and welfare of their pupils, it is necessary that they should be provided with adequate opportunities for the study of health education with special reference to the needs of school children. In recent years there has been a great deal of discussion about the place of sex education in teachers' colleges. I believe that it is not difficult for a teachers' college to provide opportunities for a study of the guiding principles of sex education with special reference to the problems of adolescent children.

The second objective of teacher education is mental training. A teachers' college which does not provide adequate opportunities for the development of clear thinking and expression on the part of its students is failing in a very important matter. Today, there is an overemphasis on lecture work which does not provide sufficient opportunities for student teachers for logical and critical thinking. It is essential that such opportunities should be provided by cutting down the amount of lecture work that is generally done and providing more time for discussions, tutorials and seminars. If the duration of the course permits, it would be advisable to have a regular course on logical thinking. A book like L. Susan Stebbing's *Thinking to Some Purpose*, or R.W. Jepson's *Clear Thinking* or Robert H. Thouless's *Straight and Crooked Thinking* could be made the basis of a useful course in clear thinking. But, if such a course is not feasible in a nine months' programme, every opportunity should be availed of to get the students to think logically and critically.

One way of doing this is to get them to analyse and discuss reports and statements in newspapers and journals, particularly statements on educational policy. For the development of clear and logical expression in speech and in writing, teachers' colleges can and should provide ample opportunities through the organisation of debates, symposia and panel discussions, and through a regular programme of essays and assignments. It is also the function of the teachers' college to help its students to acquire effective methods of study. A few general lectures on the subject followed by individual guidance in the tutorial meetings should help student teachers in this regard.

Helping student teachers to be better adjusted and to acquire emotional balance is another important function of teacher education. There is great value in a brief course in mental hygiene, specially if the course has a practical orientation. It will help student teachers not only to understand their pupils but also to know themselves better. However, a mere course in mental hygiene is not sufficient for the purpose. One of the functions of a tutor in a teachers' college should be to give personal guidance to his students as and when it is required. The tutor should be to all intents and purposes the "friend, philosopher and guide" of his wards. Social adjustment can also be fostered through a rich and varied programme of co-curricular activities in which the students are given opportunities to cooperate with their colleagues. Co-curricular activities have the value of highlighting the adjustment difficulties of students, and if the faculty is observant and tactful it can help greatly in resolving the tensions that arise and in promoting better adjustment among the students. A good proportion of students will also find classroom discipline a problem. The supervisors of practice teaching, if they are understanding and sympathetic, can help such students to see the sources of their difficulties and to apply remedial measures to improve the discipline of their classes.

As the moral and spiritual aspect of

a teacher's personality makes a considerable impact upon the minds of growing children, a major responsibility of teacher education is to aid in the moral and spiritual development of prospective teachers. Not every student who comes for training has positive moral and spiritual ideals and attitudes. Such students are in real need of help in reorienting their outlook. Here again, individual guidance given by a student's tutor or the supervisor of his practice teaching or some sympathetic member of the faculty is an effective instrument. But there is also another powerful means of aiding the moral and spiritual development of student teachers. The daily morning assembly can be, and has been, very effectively used for this purpose. A morning assembly programme consisting of a devotional song or recitation, a prayer and an inspiring address or exhortation is a highly effective means of spiritual upliftment.

As teachers need to have a proper understanding of their social environment, teachers' colleges should provide facilities for the development of such understanding. Various means can be employed for this purpose, of which the most useful are seminars, debates, symposia and talks by eminent people on current social problems. Visits to social institutions in the neighbourhood can also be arranged to give student teachers a better understanding of their social and cultural environment; and, whenever and wherever possible, they may also be encouraged to participate in programmes of social service. There is another aspect of this question of the development of social understanding which is a responsibility of the teachers' college, and that is, helping student teachers to understand the social background of their pupils. Student teachers therefore need to be acquainted with some of the techniques used in community surveys. They also need to be encouraged to use some of these techniques in developing an understanding of the pupils when they are required to teach during their period of training.

The development of a wholesome philosophy of life and of education is another important objective of the teachers' college. This is generally sought to be achieved

through a course in the theory or principles of education. I am not sure whether a course like this is adequate for the purpose unless it is reinforced by other measures. A valuable instrument for this purpose is again the daily morning assembly which can be used for helping student teachers to realise their responsibilities as teachers and as citizens of a democratic state and to develop a proper professional etiquette. Then there are opportunities in the tutorial meetings for philosophical discussions on the purpose of life and on the general objectives of education. Special celebrations of national days and of national festivals and the commemoration of national heroes can also be utilised to instil in student teachers ideas and ideals conducive to the development of a wholesome philosophy of life and education.

It is expected of teachers' colleges that they will foster in their students a sympathetic understanding of children. A course in educational psychology is the chief means utilized for this purpose. But by itself it is inadequate unless it is supplemented by some more practical measures. It is a helpful practice to get student teachers to prepare detailed case studies of one or two or more children ; for such case studies help them to understand how every child is unique and how the varied backgrounds of children condition their peculiar behaviour and effect their individual development. Besides studying individual children it is also a helpful practice for student teachers to make a study of children's group behaviour, as such a study gives them a practical insight into the principles of group dynamics and group psychology. It is understood that in a secondary teachers' college the emphasis will be on a study of adolescents rather than of younger children. It is also expected that an understanding of children will lead to the development of wholesome attitudes towards them. As such attitudes are likely to be revealed to a large extent in the actual contacts of student teachers with their pupils, both in the classroom and outside it, during the period of practice teaching, it is desirable that such experiences should be made the basis of whatever guidance is given to them by their tutors and supervisors.

Another important objective of teacher education is to help student teachers to develop skill in the choice and use of the right methods and techniques of teaching. It is for this purpose that a certain amount of practice teaching is provided for in the curriculum of teacher education. However, there is one common observable defect in the kind of practice teaching that is generally done : it tends to be stereotyped and to follow a single pattern. If practice teaching is to be really helpful to student teachers they should be encouraged to try out a variety of methods, including projects, dramatization, supervised study and field trips and to make use of a wide variety of teaching aids such as films, filmstrips, tape recording and school broadcasts. One reason why this is generally not done is because the schools that are used for practice teaching are somewhat reluctant to permit student teachers to experiment with their classes. It is for this reason that every teachers' college needs to have an experimental or laboratory school attached to it. In such a school it would be easier for the faculty to demonstrate the use of a large variety of techniques which it is not possible to do in a regular school ; it would also be possible for the student teachers occasionally to try their hand at some of these techniques. What is important is that prospective teachers should be helped to develop an experimental attitude towards teaching, and this can only be done by encouraging them to conduct experiments in their classes with a variety of methods and procedures with a view to finding out which of them are suited to their own special abilities and interests. In this connection it may also be stated that some initiation into simple research techniques and experimental designs related particularly to experiments in methodology which would be helpful in reading and understanding research studies is a valid desideratum in a programme of teacher education.

There is a great deal of emphasis in modern education on the use of all kinds of audio-visual aids, and student teachers need to be given some practical experience in the choice and preparation of visual materials as well as in the use of mechanical

appliances. There should be a comprehensive practical course in the preparation of visual aids which should be supplemented by facilities for student teachers to handle mechanical appliances like recorders and projectors ; for it is only through such direct experience that they can develop the ability to use such materials in their day to day teaching.

There are a number of other activities which form a significant part of the work of a teacher and to which student teachers should be oriented during their period of training. The most significant of these may be mentioned here. Student teachers need to be acquainted in a practical way with the organisation of co-curricular activities, with the organisation of school and class libraries and with the organisation of houses or homerooms and various forms of student government. Of course, there will be a certain amount of discussion of these matters in the theory courses : but it is necessary also to get student teachers to make a critical study of these aspects of school organisation in actual operation in their practising schools. As far as possible, an attempt should be made in the formulation of the programme of practical activities at the teachers' college itself to incorporate some of these features so as to provide student teachers with practical experience in these directions.

Another responsibility which teachers are having to assume in a greater and greater degree is in the matter of curriculum construction. Increasingly, teachers are being provided with opportunities to participate in the reconstruction of the syllabuses in the subjects they have to teach and in the selection of the textbooks and other reading materials they have to use. It is, therefore, necessary for teachers' colleges to get their students to critically evaluate the syllabuses, textbooks and other supplementary reading materials in use in the schools and to offer their own suggestions for their improvement. As films, filmstrips and slides are also coming to be used more and more in classroom instruction, student teachers need to be helped to develop the necessary criteria for evaluating such aids

to teaching. It is a useful practice to have a regular, say fortnightly, programme of educational films in which a critical appraisal of the films ( or filmstrips or slides ) shown is attempted.

Another important aspect of a teacher's work relates to the preparation and use of assignments and tests. Any amount of theoretical study in these areas will never be adequate unless it is supplemented by actual experience in the preparation of stimulating assignments and the right kind of test items. It is, therefore, necessary to supplement the work done in the lecture room by actual practice in preparing a variety of challenging assignments and research test questions related to the objectives of teaching and the actual learning experiences of the pupils. In these as in all other aspects of the work of a progressive teacher, such as the effective use of bulletin boards, the production of class magazines, the conduct of excursions and field trips, and the organisation of hobby clubs and co-curricular activities, the best principle for a teachers' college to follow is to help its students to "learn by doing" by providing them with facilities and opportunities for having such experiences as part of their practical training at the college.

As the teacher today is not a mere purveyor of knowledge but also a guide to his pupils, helping them to discover and to realise their abilities and their weaknesses, and to make their choices of curricular courses and co-curricular activities, prospective teachers require orientation in the basic principles and techniques of guidance and counselling which should, therefore, find a place in the curriculum of teacher education. The practical experience in this regard can be given in relation to the case studies that the student teachers will be required to prepare. Training in the maintenance of cumulative records is an important aspect of training in guidance which should not be overlooked.

As teachers need to grow in creative expression, it is desirable that teachers' colleges should provide opportunities to their students for rich and varied experi-

ences in creative expression suited to their individual talents and interests. It is not difficult for a teachers' college to provide for such experiences in its programmes ; but it is not easy to draw students into such programmes, particularly because there has been very little emphasis on creative expression either in school or at the university. Nevertheless, as this is an important aspect of the development of a teacher to be, the teachers' college must do its best in this regard and provide ample opportunities for its students for creative expression in speech, writing, art, handicrafts, music and dramatics. One way of doing this is to organise a number of hobby clubs, to one or two of which each student may be required to belong. Another way is to promote a varied programme of co-curricular activities in the college right through the period of the training and expect some minimum participation from each student in those activities which interest him.

I should like to conclude this article by stressing that for the implementation of such a programme it is necessary for a college to have a competent staff of teacher educators who, with their academic attainments, their professional ability and their personal

qualities are able to inspire their students. I would like to reiterate here the recommendation of the International Team on Secondary Education in this respect. The Team was of the opinion that "the greatest possible care needs to be taken in the selection of the staff of a training institution which more than anything else, determines the quality of the training that can be given by the institution." It recommended that "in staffing training institutions, attention should be paid to a candidate's academic background, his professional preparation and experience, his personal qualities and his competence in some field of co-curricular activities." I am definitely of the opinion that the emoluments of teacher educators in this country today are not adequate for attracting the kind of persons indicated in this recommendation.

I am not even sure that the methods of selection employed are always conducive to this end. Very often it has happened that the principal of the college has had no say whatever in such selection, when probably he was in the best position to say what kind of person he needed for a particular job in his college. This, therefore, is a matter that needs primary attention in any programme of teacher education.

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'Only so much do I know as I have lived.'

—Emerson

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# LETTER FROM A TEACHER\*

*Dear administrator*

THE present educational system is so defective and disappointing and its results can be so disastrous that (if care is not taken) it may become a hindrance in the way of the national urge to progress. India is planning to achieve its advancement, prosperity and happiness by constructing huge dams, launching big projects, setting up gigantic plants and large factories and workshops but has not cared to devise any scientific machinery or satisfactory method which could bring about transformation in man, who, though undoubtedly the chief instrument for the execution of these various projects, is heading towards a decline socially, ethically, culturally, spiritually and intellectually. The entire social structure, it seems to me, is coming to a collapse. The responsibility for this deplorable state of affairs rests squarely on the shoulders of those who are responsible for evolving and planning the educational system.

The educational problems have indeed become so perplexing that unless they are examined rationally and realistic methods are adopted for their solution, it will not be possible to find the requisite type of "social engineers" which is what our country needs today. The construction of the various dams or the launching of hydro-electric projects may help us in increasing wealth but they cannot change the hearts of the people or improve the quality of their mind and character. In other words, they cannot create good citizens.



I am of the opinion that we can take the situation in hand only if we examine the present educational system from the practical rather than the philosophical angle. The vision of those who are reshaping the educational system is lofty but they are apt to overlook and forget many basic and practical things, which as a practising teacher, I wish to bring to your notice in the interest of the nation and the country. I am convinced that if an earnest attempt is made to understand the situation with this background, it will help to bring about a revolution in the educational system of the country.

In my opinion the basic flaw in our educational system is that it is undemocratic because the policy enunciated by responsible officers of the Education Department, even when it is unrealistic, is imposed on the schools at all costs. Every word of a highly placed officer is taken as an order or a command which the teacher has to carry out without any opinion of his own. The first and the most important thing is consequently to re-orientate and reconstruct the educational fabric on democratic lines, in consultation and collaboration with the experienced, competent and effective workers in the field. Persons suffering from mental slavery can never produce good results. One way of doing this is to invite practising teachers to the various seminars of educational experts that are held from time to time so that they may present their views frankly and candidly.

\*This is a letter from a teacher in the Punjab expressing his views about some aspects of the existing educational situation and making some suggestions about the kind of problems that require the attention of educational administrators.

and indicate how malpractices and other unsatisfactory things can be handled in the best and most practicable manner possible.

The next important point pertains to raising the teachers' status and this can no doubt be accomplished to a certain extent by the enhancement of their salaries. But, to me, this seems only one aspect of the matter. The real solution of this problem lies in vesting the teachers with such powers as would help them to play a notable and worthy part in the service of the public. It is all very well to say that "Education upto matric standard will be made free" or that "Every village will have a school" or "Education will be compulsory" but the more important aspect of the matter is to know what useful and effective part these millions of young men will play after coming out of school. Daily I come across instances, in my own class, of children who have no bent of mind for study but are forced by their parents to do so. Teachers can certainly make them learn by heart algebraical formulae, geometrical propositions or English idioms. But the inevitable result of this 'forcing down' of bookish knowledge is that it creates aversion and hatred in these students against the school, the teacher and the society. This in turn leads to maladjustment and creates confusion instead of proving beneficial to the society. The urge to get through the examinations somehow has completely demoralised the students as well as the teachers. Notes are crammed; copying is common in the examination hall, solved papers are sometimes smuggled in and many other undesirable methods are resorted to. The net result of all this is that young persons may get the Matriculation Certificate but certainly they cannot become "good" citizens. Hence this plea of mine for the need to examine this question dispassionately and to try and raise the status of the teachers—in every possible way. To this end, I think, it would be a good idea if a link is established between the various centres of the Employment Exchange located in different parts of the country and the various middle and secondary schools and candidates are selected on

the basis of the confidential reports given by the teachers about them. Our schools are like factories producing goods but unable to know or determine their price. The implementation of this suggestion would not only raise the status of the teachers but it will help in promoting discipline. Moreover, a correct assessment of a man's intelligence and values cannot evidently be made in a five-minute interview. Therefore, the teachers should be placed in a position to act as counsellors in the selection of students and also be associated with various departments.

The idleness of the teachers during the vacations is another reason that has contributed to the lowering of their status. (I am now talking of the villages). While some "farmer-teachers" are busy with their work, others like me idle away the whole day in gossip. When I get up in the morning the baffling problem of how to pass the day stares me in the face. I cannot think of anything except to read a few books for an hour or two. I cannot participate in the welfare activities of the village as the panchayats and other rural organisations do not seem to need the counsel and guidance of the teachers. It is, therefore, highly desirable that officers in charge of the Education Department plan out programmes of constructive work in different regions of the State in which during the vacations teachers may take part. This could not only be in the interest of the country and the nation, it could also provide useful work for the village teachers who at present pass their time doing nothing worthwhile. Is it not distressing that facilities for debates and discussions on educational problems or for constructive work should not be available to teachers and idle gossip or playing cards should constitute their sole pastime? It is necessary that if teachers' morale is to remain high, they should be gainfully occupied during their vacations so that they feel that they are useful members of their community.

Yours sincerely,

A Teacher

# Dramatization in Classroom Teaching

## What is dramatization ?

**DRAMATIZATION** means showing through bodily movements the characters and activities of a story or play. Language is accompanied by facial expression, action and gesture. It attempts to narrate a story in a more vivid manner than by words alone, and it enriches the appeal of the play through the addition of the pictorial element found in the movement of characters speaking across the stage. The action is further supported by the setting. All these elements add to the reality of the story. Dramatization reproduces more nearly the reality of life than the cold characters of the printed page. Dramatization makes a special appeal to children because of its concrete appeal to the sense of sight, hearing, and the bodily action involved. It is a concrete form of play which they can understand, and in which they can participate with joy and spontaneity, if it is properly organised and directed.

## Aims and values of dramatization

Dramatization is valuable because it gives pupils opportunities to clarify thought through their attempts to reproduce the action of a story, to derive the meaning of words from action, and to enjoy the emotional release which it offers through both forms of expression. Children at school do not often get opportunities to feel a beautiful emotion and to attempt to express it in words.

It is only by keeping constantly in mind the difference between the professional and the educational objectives of dramatics that the activity can be made of value to the Secondary school pupil. One of the most valuable of all outcomes of dramatics

is that it helps the pupil to become self-directive and to develop the power of self-expression without too much coaching and direction by the teacher.

Integration of the personality is another aim of dramatics. Play production serves the very useful purpose of setting up situations to which the student must react as a whole, that is, physically, mentally and emotionally. The actor tries to obtain control over all her faculties so that she may give a truthful representation of the character whose part she is playing. In doing this, the pupil gets an opportunity to study a character not unlike herself, and to compare her own personality with it.

Perhaps the most essential element in

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the success of any kind of dramatic presentation is team-work. The prince or the page, the old woman, or the beggar, each

individual in the play has his or her own special task to carry out at a specific time. The success of the whole presentation depends on the exact performance of each individual, and the pupils get valuable training in team-work, in combined effort, and they learn to help each other towards a common end.

## Forms of dramatization

In schools, dramatization takes on many forms, from simple stories like the "Monkeys and the Cap-seller" to more ambitious attempts of the higher classes to put on "Shakuntala" or "Raksha Bandhan". It may be in the form of (a) a simple dialogue (b) a classroom play without costumes (c) an elaborate play put on a stage with settings and costumes. In each of these, there is a difference in the number of characters, the time required for preparation and the

presentation of the piece, the place of presentation, the use of costumes, stage and set-up etc. The aims and purpose of dramatization vary in each of the above three instances.

### Classroom dramatization

Dramatization should be employed for its value as an activity appropriate for children. It may be used as a means of arousing interest in literature and history, as in acting out the parts of famous characters in order to understand an important historical event; but this use of dramatization should be always subordinate to the value of the experience itself. Dramatization is best when employed as a means for obtaining enriched experiences from literature, history, biography and other school subjects in which the material

can be readily adapted to such practice. In any case, it should be interesting for itself alone, otherwise it becomes an artificial and unreal attempt. It should be a means of pleasure for the children, enabling them to obtain enjoyment through direct experience with objects, persons and events. It can afford opportunities for achieving the useful purpose of making concrete and vivid, through bodily expression, the more abstract phase of school work.

I am giving below a few items selected for classroom dramatization. Some of them were subsequently presented for stage dramatization with costumes etc.

### A Pageant

*The Festival of Flowers*; The students of Class X read the history of the end of



A Scene from "Phulon ki Sair" Staged by Students of Class X



A Scene from "Jagriti" an original play composed by the students for Gandhi Jayanti

Moghul rule in Delhi, and how the Moghul Emperor Bahadur Shah started the Festival of Flowers in the village of Chirag, Delhi. A procession was generally taken out in which people of the city, musicians, dancers, drummers and members of the royal family participated. It was led by a few people carrying large fans decorated with flowers. The procession started from the Red Fort and after covering a distance of 15 miles reached the temple of Jogmaya near the Qutab Minar. The script was written and pageant produced in Hindi. The historical account read by the students was adapted and re-written for presentation as a pageant with dialogues interspersed. The students learnt to rewrite and adapt the historical account, to select and allot parts, to study and make the costumes of the period, to set up the stage and scene of the procession. The pageant was colourful and impressive and the characters were well chosen and appropriately acted. Sixty students participated in it.

### A Historical Scene

*The Impeachment of Warren Hastings*: Class XI came to the story of Warren Hastings while reading about British Rule in India. This was a dramatic scene. The account was read from various textbooks in History, and then adapted and re-written by the pupils. Parts were assigned, and the scene reproduced in the classroom in a very realistic manner. There were 14 characters

in this. It was put up in Hindi as well as in English.

### A Playlet

*Humayun's Illness*: This is a playlet in the English textbook of Class VIII, and describes how Babar gave his life for his son. The students read the play, selected roles, and acted the play in class. Several groups of students in turn acted the same play. They got practice in correct and clear expression and speech, and gained confidence in playing roles. Twelve students, at a time, participated in this playlet.

### A Narrative Poem

*The Princess and the Gipsies*: Class VIII cast this narrative poem in the form of a play depicting how a princess leaves her place of luxury and comfort for the sake of the wild music and free life of the gipsies, and becomes one of them. The parts were sung by the characters, there was music, colour and movement, and children enjoyed far more than merely reciting the poem. Twenty girls took part in this presentation.

### Plays

*The Sleeping Beauty*: Classes VIII and IX read the story, and wrote it out in the form of a play which was corrected by the teacher. This was made into a one-act play with six scenes. The costumes were designed and made after consulting many pictorial books of fairy tales, and the stage and



A Scene from "The Sleeping Beauty"  
Presented by classes VIII and IX

scenery set accordingly. All the preliminaries were part of classroom instruction in English, handwork, and art. Twenty pupils participated in it, and presented it before the whole school.

*Madhzam Vyayog* (in Sanskrit) : Scenes from the Mahabharata, depicting the story of Bhima recognizing his son Chatotkacha. This was taken from the textbook of class IX. The pupils selected the characters, learnt and rehearsed their parts, designed and made costumes according to the period to which the story belongs. Most of the work was part of classroom instruction, after which the play was presented before the rest of the school. Sixteen girls took part in it.

### Subjects appropriate for dramatization

The subject-matter and materials suitable for dramatization are extensive. Literature and history are the most common sources for materials, and are most readily adaptable to stage activities. The practice of adapting a story in non-dramatic form to dramatization involves considerable composition, and this is a valuable training in language—and we found this in English, Hindi and Sanskrit. It stimulates the imagination of children, encourages inventiveness, and appeals to their creative urge. We also encourage the making of original plays by pupils, and for these they set the stage and design original costumes, e.g. for Gandhi Jayanti many of the pupils wrote original plays on some aspect of the life and work of Gandhiji. Out of these four were found to be very suitable for presentation before the entire school. One of these was "Jagriti". They were corrected by the teachers, characters selected, and when presented, were of a high standard.

### Directing dramatic activities

In the development of dramatic activities, the teacher must stimulate, guide and direct. The types of dramatic presentations commonly used in the school are—

1. Activities adapted from stories and books.

2. Those created by children from life.
3. Those which are already composed in dramatic form by others.

These different types require, in some respects, similar assignment activities from the teacher. A partial analysis of the assignment activities which characterize these three different types of dramatization is made below :

#### 1. Dramatic activities adapted from books

- (a) The teacher and pupils have to read and select the parts of a particular story to be used.
- (b) These have to be adapted for practical classroom purposes.
- (c) The students learn the parts of the play assigned to them.
- (d) Rehearsing the materials while preparing the presentation.
- (e) Recasting and revising the parts for final learning.
- (f) Rehearsing again for final presentation.

#### 2. Dramatization activities created from unorganised materials

- (a) Finding the activity to be dramatized.
- (b) Developing a plot.
- (c) Selecting and organising materials.
- (d) Writing the speeches.
- (e) Revising the speeches and correcting them.
- (f) Learning the parts of the play.
- (g) Rehearsing the parts for final presentation.

#### 3. Plays already written

1. Selecting the parts to be learnt.
2. Learning them.
3. Rehearsing them.

In addition to these activities there are a number of others which form a part or all the assignment at times e.g. setting the stage scenery etc. The matter calls for a great deal of consideration of the aptitude of each individual member of the class. Some children require encouragement and oppor-

tunity to develop and perfect these abilities in which they are deficient, while others require a different type of assignment to develop additional abilities that they have never attempted to use. In fact there is no other procedure which offers greater opportunities for a variety of assignments than dramatization.

### Class Activities

The very nature of dramatization makes the class period largely a working and planning period. Little can be done in the way of outside preparation except the learning of parts and the collection and organisation of material since the play is actually started. Most commonly, therefore, the classwork consists of planning and organising, selecting material, composing, constructing and actually practising the dialogue and the action of the play.

In creative dramatic activities a large amount of discussion, planning and organisation are essential. Pupils and teacher must select the drama, plan the dialogue and the action, select the characters, and plan the scenes, stage settings etc. This type of work is cooperative and requires that children and teacher work together in a group. After making the plan, individual assignments for certain types of work may be given, for example, one pupil may collect pictures from which ideas may be gained for costumes, another may plan the scenes, a third may study other plays to get ideas for action and dialogue. All sorts of things may be undertaken by individual children, on their own, or at the suggestion of the teacher.

Many times, cooperative work consists of writing of the dialogue of the play, with the teacher giving suggestions and helping individual students with their work. Rewriting and revision of parts may constitute the work for the day. Then, finally, comes the actual rehearsal. Pupils and teacher work together on the problems of expression inherent in the activity, and carry forward the work to completion.

Simpler dramatic activities, which consist

of merely reproducing a play already written by some one else, may need, of course, far less time, and far less work, in and out of class. A play may be read by the class and acted out in an informal way within the confines of an ordinary class period. In such a case, no home assignment is either necessary or desirable. Such little plays have been common in schools for a long time, and are valuable as preparation for original playmaking by the children, to train the pupils in better forms of expression and to improve their action, gestures and voices.

Pageants, pantomimes and other forms of dramatic attempts offer, as do original plays, a large scope for cooperative purposing, planning, organising and constructing. The selection of material, planning of the sequence of scenes, designing of costumes etc. give the pupils an opportunity for creative work which they enjoy so much. The teacher should guide, direct and encourage original ideas and attempts as much as possible, for the real value of dramatics lies in the amount of thinking and planning that children have to do in carrying it to completion.

### Evaluation

The success of dramatization may be judged by the effect which a play has upon the audience and by the reaction of the listeners. It should also be judged by the extent to which the play has initiated other activities or has suggested further study. Testing in the usual sense of the word is then not necessary. Since dramatization is engaged in primarily for its own sake, there is little or no value to be obtained by using a measuring instrument in the form of a written test. A questionnaire such as the following may be used to determine the extent of participation of the individual student, in the dramatic activity—

1. Did the play arise out of classroom discussions?
2. Was it taken or adapted from a story or a book?
3. Was it an original work of the class?
4. Did an individual student write the play?

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5. Does the play fulfil a need or purpose ?
6. Did you share in the selection of the play for dramatization ?
7. Were you keen and enthusiastic about the play ?
8. Did you take any part in writing or revising or adapting the dialogue ?
9. Did you help in finding out the appropriate costumes from pictures
10. or other sources ?
11. Did you make any of the costumes or scenery ?
12. Did you help in the play production ?
13. Did you work in the stage setting ?
14. What was the effect of the play on you ?
15. Suggest some improvements in the play or in its production.

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Take time to work, it is the price of success. Take time to think, it is the source of power. Take time to play, it is the secret of youth. Take time to read, it is the foundation of knowledge. Take time to worship, it is the highway of reverence. Take time for friendship, it is the source of happiness. Take time to love, it is the one sacrament of life.

Anonymous

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# READERS' FORUM

## EDUCATION AND EMPLOYMENT

This is the fourth series of articles on the subject—to what extent should secondary schools prepare a student for an occupation at the end of his secondary school career? Contributors to this series are Dr. H.S.S. Lawrence, District Educational Officer, Coonoor, and Dr. B.G. Gokhale, Head of the History Department, Siddhartha College, Bombay. Dr. Lawrence points out that before us stand two glaring facts, one of the educated unemployed who cannot find employment and the other of the Second Five Year Plan with its immense requirements of manpower but no suitable market to choose from. This, he maintains, is a clear question of misdirection in education and that what is required in our country today is more of vocational high schools. Dr. Gokhale on the other hand contends that what we have been witnessing is not the failure of general education but the inadequacy of a wholly liberal school curriculum and that what is necessary is a proper combination of occupational training and liberal education in our secondary school.

### H.S.S. Lawrence

As a District Educational Officer who has to inspect Secondary schools, I have the opportunity to see at first hand the content and quality of instruction imparted in these schools as well as the results of such instruction. Therefore, what I have to say on the subject is with direct reference to the actual situation as it exists.

The first thing that strikes me in this situation is the marked and rising tide of unemployment among the educated youth. And what is worse, the largest number of educated unemployed seek nothing but white-collar jobs. In 1955, 5.5 lakhs of educated persons with Matric pass were unemployed.

Secondly, there is the Second Five Year Plan with its immense requirements of manpower and its principal objective which is creation of adequate employment opportunities. According to the figures worked out, it is estimated that during the Plan period altogether 10 million additional persons are likely to be pressed into gainful occupation outside agriculture. It is also said that if unemployment is to be eradicated during the Second Five Year Plan period, 15.3 million job opportunities at least will have

to be created.

From the two facts pointed out above, is it not clear that here before us is a question of misdirection in education because on the one hand is the Plan which needs manpower, and on the other is manpower which is not wanted! This problem is there because Secondary education has been too general and diffused with the result that it has created "educational products" for which there is no market even though the market itself is full of needs for which there is no supply. This then is an anomaly which if not put right will lead to frustration and further economic disparities. I know of hundreds of children in the age group of 6-11 who discontinue schooling because they see nothing inspiring before them but a long line of matriculates unemployed and unwanted for any useful occupation. The only logical conclusion of all this is that Secondary education cannot any longer continue to be imparted on traditional lines and that it must be closely related to the needs of the country if it has to serve any useful purpose. It is absolutely necessary that the expansion of education and training facilities should be closely linked to the future requirements of the country. The Planning Commission is not unaware of this situation as is apparent from the following

extract from its Report on the Second Five Year Plan :

"Judged from past experience the educated remained out of gainful occupations in part due to the fact that in its evolution the system of education has not been related sufficiently to our needs of economic development. This also explains to some extent why in the midst of unemployment among the educated shortages sometimes arise." (published in 1956).

The advocates of general education argue that it provides "the basic qualities such as the sense of responsibility, initiative, ability to think, weigh evidence and come to right conclusions." If these basic qualities are to be fostered, they say, Secondary education should take the shape and character of general education rather than of any specialised preparation for any particular job. But I would like to ask the question—does not vocational training provide a field for acquiring these qualities? Specialised training implies a close cooperation between the mind and the hand. It teaches habits of accuracy, precision and honesty. Pupils are trained to cooperate and to be responsible in a workshop. They are trained to be clean and thorough at work. Does not such training provide them with an opportunity to develop initiative and their faculties of thinking? To say that general education alone can foster these qualities is going to the extreme. S.R. Slavson in his book *Creative Group Education* has said—"Social attitudes are developed in a shop as concomitants of pleasant and joyful work. Mutual admiration, cooperation with one another, responsibility for the materials and the shop generally appear as the most natural outcomes from the reactions in a free work-room." The Secondary Education Commission has also said: "The workshop is undoubtedly a character-building institution."

I would like to make it clear that I am not against general education. But what I am against is the contention of having general education for its own sake because to advocate that is to ignore realities. It is time that Secondary education in India today puts increasing stress on the prepara-

tion of youth for vocational careers. It has to be recognised that to prepare pupils for the world of work is one of the important functions of the school. What we need in our country are vocational high schools like those in the U.S.A., proper vocational guidance and apprenticeship system as efficient as in Denmark. Then and then alone will our Secondary education system be alive and meaningful.

## II

### B.G. Gokhale

OUR educational system has often been criticized for its numerous failings. Dissatisfaction with its working and results has been growing over the last decade and the increasing number of the educated unemployed has sharpened the edge of this criticism. Our schools and colleges have been turning out Matriculates and graduates in thousands year after year and the impression has gained ground that this system of education is capable of being neither fully satisfying to the student concerned nor is it in a position to answer certain demands which society has to make of it.

This system of education has continued through the decades and its shortcomings have been a subject of public discussion at least for about twenty years now. The system came into existence in answer to a specific set of needs which required a steady supply of white-collar workers able to keep accounts and carry on official correspondence of a minor sort. The engineering and vocational schools were too few in number to count for much in the total educational configuration and the system developed into what may broadly be described as liberal education as understood in the closing decades of the last century. There have been changes in the system but these changes have rarely been such as to alter the firm lines of its occupational and cultural anatomy. There has, thus, been a fundamental contradiction in the system of education with which we have had to make do so far. It will be far too sweeping a condemnation to

say that the system has entirely failed. We must remember that it was largely responsible for the attitude of revolt which found its culmination in 1947. The most convincing proof of this may be found in an analysis of leadership on the national as well as State levels today ; barring a few doctors most of our leaders have been products of the system of liberal education as understood and practised in this country since 1910. Whatever its shortcomings this leadership has proved that its mental, moral and intellectual quality has been sufficiently virile to offer to the country, in a very crucial period, political, organizational and cultural guidance of an order both compelling and difficult. But if its contribution to recent Indian history has not been negligible the system has clearly passed beyond its stage of historical fulfilment. India of 1958 is not the India of 1928, much less that of 1918. The needs of the nation today are generically different from those of twenty or thirty years ago. That these needs have not been met by our system of education is evidenced by the army of the educated unemployed on the one hand and the scarcity of personnel in nation-building areas of planned activity on the other. This contradiction, therefore, cannot be resolved unless the educational system changes in answer to the new national demands. And if any changes are to be considered whether in terms of employment or leadership such changes must relate to certain structural changes going on within the Indian society.

To say that there will be no further need of liberal education is to oversimplify the problem. There will be need for leadership at all levels and for providing such leadership the nation will have to equip its educational system with a curriculum facilitating the inculcation of qualities of leadership. Such leadership, of course, cannot spring immediately from the schools, for leadership is a matter of individual ability and social acceptance. We cannot, therefore, assume that the schools will be able to provide that leadership without the assistance of higher education after the school stage. On the other hand, we must always bear in mind the

desirability of ensuring the inculcation of qualities of social awareness and basic occupational abilities through the system of secondary education. The curriculum, hence, can neither be wholly vocational nor wholly liberal. We have been witnessing the inadequacy of a wholly liberal school curriculum, for our schools have failed in equipping their students with the ability to become occupationally useful to the country. I do not think this defect will be remedied simply by changing the bias from liberal to vocational. Perhaps, I venture to think, the remedy may prove worse than the disease. What is necessary is a proper combination of occupational training and liberal education in the secondary schools. It is too much to expect that as soon as the student completes secondary school he will become a skilled occupational worker ; nor do I think it is eminently desirable. But the schools should certainly be in a position to give him certain favourable occupational attitudes linked to a background of general liberal education. The inculcation of such attitudes is very necessary today in the context of our hierarchical social system which disparages occupational work involving manual labour of any kind. If the vocational training in schools succeeds in removing this attitude of disparagement it will have served its primary purpose. Our need in the coming years will be for engineers, technicians, professional experts and social leaders and the school system must serve all these ends to a certain extent. If we give our schools a wholly vocational bias it will be difficult for them to function as a common training ground for leadership, occupational or otherwise. The country is industrializing rapidly and will demand mechanical skill and manipulative ability in an increasing measure. These skills may be acquired by our youth through actual occupational experience in factories provided their school education equips them with the basic knowledge and required mental attitudes towards their jobs. I am not too much worried by the problems of the present ; they are, no doubt, important. However, what I would assume to be more important is the situation ten or twenty years hence for this situation will be such

that it will have left behind it economic stagnation and social stratification. In other words it will be a situation that normally confronts an industrialized and largely urbanized national society. The army of the educated unemployed that we see today is the result of very special circumstances and as soon as these circumstances disappear this army too will go with them. To a certain extent it is an arguable point whether such a large army of educated unemployed is inevitable in the circumstances of today for it is possible that given a better organization of distribution of occupational opportunities the army can be reduced in its numbers. Do we not see the need of a large number of workers and teachers in the villages and community development areas and cannot the present matriculates and graduates be found employment in these areas with a better organization of employment opportunities ? I am not assuming that all of these will be absorbed in the present plans but the possibility of mal-distribution of the available manpower being, to a certain extent, responsible for the swelling ranks of the educated unemployed cannot be altogether ruled out.

The point I would like to make is this—that it will not solve our problems just by turning our existing schools into vocational schools. I think the spirit of liberal education is necessary to our educational system if it is going to be meaningful as a process to the students themselves and beneficial to the society as a whole. If we make our schools completely vocational we might have employable material out of them but surely we do need something more than just men and women working in certain professions. We want them to be active citizens of a working democracy and not just members of a technocracy dedicated to the realization of full employment and

nothing more. But if we want to have active citizens we also want them to be employable by our economy and social demands and for these twin tasks our schools must be equipped by a curriculum which is neither exclusively liberal, as at present, nor wholly vocational as demanded by some. The heavily liberal bias can be reduced by lessening the work-load of the liberal subjects. The instruction in languages is a case in point. At present we insist on most of our secondary school students learning three or four languages. This is wholly unnecessary. It is not necessary that we compel every secondary school student to learn Sanskrit or a classical language. The need today is for more of science subjects than classical languages and along with science subjects may also be included instruction in crafts. A well-balanced school curriculum must carry a judicious combination of humanistic education, social sciences and natural sciences as well as useful arts. The secondary school is the ground where the student is given an opportunity of tentative thinking in terms of interests and occupations and its curriculum must be flexible enough to let him make the final choice by the time he is ready to leave school. Education is, after all, a means of human fulfilment, and gainful occupation is but one, albeit very important, aspect of that fulfilment. A school system completely oriented in the direction of easy and full employment is an ideal solution if we are primarily interested in using our schools as an instrument for filling occupational needs alone. But I am sure we think of our school as much more than mere training ground for employment and no more. Along with full employment the nation's Constitution promises certain other fundamental rights comprising belief, worship, expression and conscience. The schools must bear in mind these rights when they plan their curriculum.

# The Library in the School

IN spite of all the wonderful developments in the methods of communication which have been introduced during the last century—cinema, broadcasting and television—despite the introduction in schools and colleges of filmstrips, tape-recorders, gramophones and other audio-visual aids, it is still true that “books are, apart from the work and influence of the teacher, the chief instrument in education.”\*

Books are not only relatively inexpensive in themselves, but their use requires no complicated apparatus, no source of electricity or other power, and they can be used, more or less effectively, by everyone who has acquired and retained the skill of reading.

The same report goes on to say: “it is not enough to possess a number of class textbooks, however attractively they may be written and produced. When the child enters the school (and indeed earlier) he needs a store of books on which he may at all times draw, books suitable to his age and development; in which he may follow up and enlarge his own interests, and enrich and illumine his growing consciousness of the world around him; and, as he grows so will the range on which he will draw widen. This implies the presence in the school of a collection of books—a library in fact—on which the children can draw.”

## What makes a good school library?

The mere presence of a collection of books, however, does not make a school library. I myself have sad memories of the “library” in the primary school which I

attended in England some thirty-five years ago; a dingy assembly of battered and grubby volumes, piled haphazardly on the shelves of a cupboard, behind carefully locked doors. On Friday afternoons, the key was produced, and each child was handed a book which he was permitted to read for half an hour or so, after which it was as carefully locked away again until the following Friday.

There is a world of difference between this and the description of a modern school library which is required to be “the centre of the intellectual life of the school, available at all times for reference, for study, and for private reading. It should be a quiet place, an environment which encourages study and reading, furnished and equipped for comfortable use by a number of individuals.”

By

John Smeaton F.L.A.

Librarian, British Council, New Delhi.

The library when properly arranged and organised can play a very important part in the life of the school, and it has in addition an objective which cannot be attained by formal teaching in the classroom. The two main aspects of education have been defined as the development of the child as an individual and as a member of the community, and its more important aims include ‘the encouragement of activity rather than passive reception; the training of criticism and intellectual judgment; the formation of valuable tastes and interests...; and in general the building-up of a sense of responsibility’\*\*. It is obvious that such an education cannot be completed within the few years which the child spends in school; the most that the school can hope to do is to lay a foundation upon which the child can later develop his personality as an

\* School Library Association, “School libraries today”, London, SLA, 1945, p. 2.

\*\* “School libraries today”, p. 2.

individual and a citizen. To do this, he must be able to read, and be willing to read, intelligently and critically, not only in school, but throughout his life.

The school can teach reading, but reading is a skill which, if not exercised, can be lost. Once the child has left school, he will only continue to read if he has acquired the habit of reading. In a recent book, Padmashri S. R. Ranganathan has said of this "...bad habits have this advantage over good ones—like weeds, they grow unaided ; good habits, on the other hand, need careful tending like fruit and flowers. The library habit, then, must be fostered with the greatest care. It must be induced by deliberate methods even in childhood."\*

The last sentence is perhaps misleading : most children can be taught to read by "deliberate methods" and formal training, but they cannot be "*made*" to love reading, any more than they can be "*made*" to love mathematics. They can be encouraged to read, and a good school library, with (more important still) a good school librarian, can foster the child's interest and lead him to the love of books, without which the reading habit cannot be acquired.

### **Five essentials of a good school library**

G. R. Ralph in his book : "The library in education" has summarised the educational aims of the library as :

"To encourage the reading habit ;

To develop in pupils the ability to learn from books without a teacher ;

To break down the rigid divisions which the school time-table often creates between different subjects ;

To give social training."

To enable it to fulfil its purpose and achieve these aims, the library must possess five qualifications :

(i) It must have a carefully selected and

adequate stock of books, chosen to meet the particular needs of the individual school.

- (ii) It must have adequate accommodation and equipment. It must be properly organised and efficiently administered.
- (iii) It must be staffed by trained personnel, who are skilled in both library and educational techniques.
- (iv) It must be generously financed.

(i) There is no maximum size to which a school library should be limited but it is possible to define fairly exactly the minimum number of books which is necessary : in a higher secondary school with pupils up to university entrance standard, a British authority has stated that 1600 volumes will be required, and in a secondary school which goes only to certificate level, one thousand.\*\* These are minimum effective sizes, but a fully developed library should possess 8,000—10,000 books in the former type of school, and 6,000 or more in the latter. The book stock of the library will be made up of three main elements : books which will be used in the general work of the school, to reinforce and extend the information contained in the class textbooks, and to provide material for projects and individual study, a comprehensive and attractive collection of recreational reading, both fiction and non-fiction, which will provide the principal material by which the love of reading will be encouraged ; and finally, the reference section, a small but important selection of encyclopaedias, dictionaries, atlases, yearbooks and similar books, designed for the rapid finding of information, and not for continuous reading.

Each school should develop its own library to suit its own requirements ; there is no "official school library", and any centralised system which attempted to prescribe a set list of books, (unless it were intended purely as a basis on which to build an individual library in each school) would be strangling itself at birth. Every library must reflect local conditions, occupations,

\* S. R. Ranganathan : "The organization of libraries". 2nd ed. Madras, OUP, 1956, p. 4.  
\*\* C. A. Stott and Landau, T., "Encyclopaedia of librarianship" London, Bowes and Bowes, 1958, p. 276.

## THE LIBRARY IN THE SCHOOL

industries and interests ; even schools in the same locality should develop libraries which are as individual as the school themselves.

(ii) The second essential for an effective school library is adequate accommodation and equipment. Although in most schools the librarian has to be satisfied with a single room (often a converted classroom in the older schools), the higher secondary school ideally should have much more generous provision. The first requirement is for a large room to house the bookstock, which should be arranged in shelves built against the walls.

The floor-space must be sufficient to provide room for shelving, tables and chairs for a complete class to work at one time, a desk for the librarian, and space for catalogue cabinets, etc. In a secondary school, with an attendance of 600 pupils, a minimum area of 1000 square feet is recommended.\*

In addition to the main library, the larger school will require also study rooms in which individuals or small groups can work in privacy, a reading room with periodicals and newspapers, an office and work-room for the library staff, and a store-room for books, back-numbers of periodicals, and so on.

(iii) It is generally accepted that in all but the very largest schools there should be one central library. A collection of books gains in value in geometric progression as its size increases, and one large collection available always to the whole school, is of very much greater value than a number of smaller collections, grouped according to class or subject. It is also more economical, for unnecessary duplication is avoided.

The school library should cultivate good relations with the local public library, and pupils should be introduced to the public library as part of their normal training. During the school years, the public library will be a useful adjunct to the school library especially during holidays ; after leaving school or the university, it will be the principal source of books for the serious reader. Because of this, it is important that the routines and methods used in the

school library should be closely related to those of the local public library, so that the child, on leaving school, may be able to use the public library without difficulty.

Librarians of public libraries are not generally interested in what the individual reader likes, but are more concerned with mass demands. The school librarian, however, has a much smaller number of readers, and must not think in terms of popular demand, but of individual necessity. He has, for instance, a problem which hardly affects the public librarian at all—the backward reader. Only in the school is it possible to improve reading ability, and, as we have said, only in the school library can we instil a love of reading. The public librarian receives, in general, only those people with whom the school has been successful.

This means that the school librarian, much more than his colleague in the public library, must be able to assess the individual's reading ability and preferences. Since the school is a small community, it is relatively simple for the school librarian to maintain personal contact with the students, to guide them in their choice of literature, and to discover the reasons for their personal likes and dislikes.

(iv) In most schools, it is not possible to employ a full-time professional librarian, nor indeed is it desirable. The school librarian is not simply a "bibliotechnologist", he must also be personally familiar with all the activities of the school, and in daily contact with its operation. He must understand its problems and its intentions ; he must be thoroughly acquainted with the curriculum and the personalities of both staff and pupils. At the same time he must be technically competent in librarianship, and must be allowed sufficient time for the efficient administration of the library.

If the library is not too large, it can be managed efficiently by a part-time teacher-librarian, who will generally be a trained graduate teacher, who has taken a "certificate course" in librarianship. In the

(5) School Library Association, "Memorandum on planning and equipment". London, SLA, 1955, p 3.

United Kingdom, the Library Association and the School Library Association have agreed upon a syllabus for training, and award a joint certificate for teacher-librarians who pass the required examination.

In the largest school libraries, more than one teacher-librarian will be required. This is a much better system than employing one full-time librarian, who cannot be able to acquire such a close knowledge of the working of the school as the part-time teacher-librarian.

(v) We now come to the most difficult problem of all—that of finance. Basically, the financing of the school library resembles that of any other educational programme—we must provide for both capital and recurrent expenditure. The original capital grant should pay for the furnishing and equipment of the library, and for the purchase of the original stock of books. In the United Kingdom, the original capital grant for a library in a higher secondary school has been assessed at £ 1500 (Rs. 20,000) with an annual grant to meet recurrent expenditure of at least £ 200 (Rs. 2,667), for a school with 600-700 pupils. These figures were reasonable minima in the United Kingdom in 1957, but costs are still rising. It is very difficult to estimate comparable costs for India, and it must be remembered that these figures do not include salaries, which are carried on the normal budget of the education authority and which are much lower here than in Great Britain.

In some schools it has become a custom to hold concerts, sales-of-work and similar fetes as sources of income for the library, but any funds raised by such means must be regarded as additions to, and not substitutes for, an adequate grant from the education authority.

Statistics collected by the Library Association in the United Kingdom reveal that in public libraries the main divisions of expenditure are approximately :

Salaries :	50%
Books :	25%
Other expenses :	25%

In the case of school libraries, since salaries are generally borne upon the general education vote, and fabric charges are covered by the normal repairs and redecorations of school buildings, the proportions are : books: 60%; Periodicals and newspapers : 20%, binding : 15% ; miscellaneous expenses : 5%. In the development period of a school library, an even higher percentage may be spent on books, and relatively less on binding and periodicals.

### An efficient school library service is an economy

An efficient school library service is a very expensive affair, but in the long run, there is no doubt that it is a real economy. Many countries are now spending a very high proportion of their national income on education, and most of this goes to primary and secondary schools. Expenditure on libraries, both public and in schools, is something of an insurance against loss of the money spent on formal teaching. If we spend money on teaching children to read, and then deny them the opportunity of reading either by allowing reading to remain a mere school exercise, or by confining them to class textbooks and the strip-cartoons of the newspapers and comics, then we are deliberately throwing money down the drain. Reading is not a gift, it is not a natural activity ; it is an acquired skill ; if the ability to read is lost, all of the money spent on education is wasted ; yet the cost of school libraries is minute compared with the cost of universal education.

And finally, we must not plan the school library upon too low a standard. The most important years in the child's life, as a reader, are those between eight and ten. Then the difficulty is not so much to persuade him to read as to guide and direct his taste. Nearly two hundred years ago, Dr. Samuel Johnson advised a friend in words which every teacher-librarian, every teacher and every parent, should always keep in mind : "I would put a child into a library (where no unfit books are) and let him read at his choice. A child should not be discouraged from reading anything that he takes a liking to, from a notion that it is above his reach".

## CLASSROOM WOUNDS

DR. Susheela Udhay stepped out of the theatre after completing a serious and tricky surgical operation with her usual skill, calm and confidence. She was serenely aware of the admiration of colleagues and assistants as she drank her cup of coffee and made her way to numerous other cases and engagements. Efficient in the highest degree, quite confident of herself, with a pleasing personality, at the age of thirty-six she had already made a name for herself as a brilliant surgeon in her special field.

Sitting back in the car on her way to her next appointment she allowed her mind to dwell briefly on the strange phenomenon that always troubled her, though mercifully for a very short time, when she was on the brink of any activity. From the time of her adolescence she had known that feeling before tackling an examination paper, taking part in a competition, performing an operation, making a speech, taking the chair at a meeting. A heavy oppressive feeling in her forehead and at the nape of her neck, a weariness in her legs for which there was absolutely no reason ; all of which disappeared magically once she embarked on the activity, whatever its nature.

If she was the least bit nervous, the least bit uncertain of herself, this tightness of the nerves, this reasonless dread would be explicable. But she was not nervous or uncertain ; she was quite sure of that. It did not really worry her much, except that the momentary physical symptoms were unpleasant, and moreover an unexplained problem worries a tidy and efficient mind. Or perhaps it did affect her, more than she would acknowledge even to herself. Anyway she had always much else to think of, and she dismissed the problem, as she had done so often before, as one of those reason-

less dreads one has to learn to live with.

But perhaps it was not so "reasonless" as she herself thought. To get at the root of it we have to go far back, thirty-one years before, to the opening of term in the Kindergarten of a fashionable girls' high school. Little five-year-old Sheila Udhay had "graduated" from the nursery class she had been attending to the kindergarten of a big and well-known school. She was looking forward to her new school, for even at that age the enterprising little five-year-old liked to enlarge her experience. She had been very happy at the nursery school that she had attended so far from the age of two and a half. She had been treated with sympathy and understanding, her efficiency praised and her helpfulness encouraged. For she was possessed of social sense and was already protective to others. She would get up to arrange things and to help the still smaller children at their activities.

In order to make the parting easier, both her parents and the nursery school teachers had encouraged her to look forward to the change. So the size of the new school did not over-awe her, nor was she disturbed by the numbers of older children who were about.

Nevertheless all did not go well for the expectant hopeful little girl in the very first week. The kindergarten mistress looked upon her baby efforts at helpfulness as being officious and interfering ; the child's happy poise appeared to her as conceit and she thought the child needed "taking down a peg or two". The opportunity soon came. Little Sheila could not do a sum that had been set. Quite normally and naturally she leaned over and looked into a class-mate's slate. In the nursery

class they had all helped one another ; and she herself had often assisted other children in getting right their little tasks and activities.

But with a cry of satisfaction the teacher pouned on her. "Sheila, you are a cheat !" she called loudly. The child looked up at her in wonder, not even understanding her loud denunciations. They were meaningless to her ; for in the surroundings of the nursery school the children were all encouraged to help one another, and situations implying cheating did not arise. "Are you sorry you cheated ?" the teacher asked at the conclusion of a long scolding. But the surprised child continued to gaze up at her mistress with wide eyes and said nothing. "She is sullen and obstinate", the teacher thought to herself. "I am not going to allow cheating; I must nip it in the bud"

On Sheila's slate she wrote. "I am punished because I am a cheat". She tied the slate round the little girl's neck and stood her on a stool in front of the other children. She ordered her to stand still, which Sheila did. The teacher looked out for signs of "repentence", but Sheila was not the sort of child that sheds tears. She

stood there in silent bewilderment which was easily interpreted as defiance and obstinacy. Her feet and her head grew heavy, the cord weighed on her neck, but she did not cry. So there was no remission of her sentence till at last the bell rang and the class broke up.

Sheila had a sensible and understanding mother. She called on the headmistress and described the situation to her. The Head listened quietly and said very little. But presumably she reproved her teacher, for the latter did not persecute Sheila any further. Presently Sheila's parents moved to another town and she went to a different school. Both home and school were sensible happy places, and Sheila put the little unpleasantness far behind her and forgot it all. So at least it seemed.

But the kindergarten mistress's lack of understanding and savage punishment had left a scar in the complicated "body-mind" structure that is man. And there was reason behind the flash of "senseless" anxiety and discomfort that so often afflicted the efficient young doctor. To a less sound and happy nature, the injury would have been greater and the damage more severe.

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It is a profound error to believe everything has been discovered ; it is mistaking the horizon for the boundary of the world.  
—LEMIERRE

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# TEACHER EDUCATION IN THE U.K. AND THE U.S.A.

OUR educational system, and particularly that vitally important part of it which is concerned with the education and training of teachers, has been modelled largely on that of the U.K. and, since Independence, we are being increasingly influenced in our teacher education programmes as in other spheres of educational reform by ideas and practices prevailing in the U.S.A. It will, therefore, be worthwhile and instructive to survey recent trends in this field in these two important countries in order to find out to what extent we have been consciously or unconsciously influenced by them.

To understand the ferment of new ideas and ideals that are changing the face of teacher training institutions in the U.K. and the U.S.A., it is necessary first of all to appreciate the growing reawareness in both

By

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use the word 'reawareness' because in the first flush of enthusiasm that marked the birth of the "Century of the Child" there grew up a marked tendency not only to put the child on the forefront of the educational picture but to push the teacher into the background. Ardent child worshippers enthusiastically talked of 'emancipating' the child from the tyranny of the teacher and to relegate the latter to the role of a mere 'observor' of the natural self-development of the child. But this enthusiasm was fortunately short-lived and the pendulum in the second half of the century has swung back, giving the teacher his rightful place together with the child in the educational scheme of things. This awareness of the fundamental importance of the teacher has led to a fresh realisation of the urgent

necessity of providing intending teachers with the right type of preparation which will equip them to discharge the responsibilities of their profession in an adequate manner. An analysis of the implications of the "right type of preparation" in both the U.K. and the U.S.A. reveals certain significant features.

## Analysis of Teacher Preparation

Firstly, there now exists almost complete unanimity of opinion among educators in both countries that teaching is a profession, like law or medicine, and that the prospective teacher like the prospective doctor or lawyer, needs a certain type of education and training before he can be permitted to practice his profession. As a result it is required in both countries that intending

teachers should have  
a licence to teach  
(from the Ministry  
of Education in the  
U.K. and State Department  
of Education in

the U.S.A.) before any school can or will employ them. This licence as a rule is given only if, beside his general education, an intending teacher has pursued successfully a recognised course of professional training. The National Union of Teachers in the U.K. and the National Education Association in the U.S.A. have both campaigned for this position with success. Therefore, while in both countries untrained teachers are sometimes permitted to teach in secondary schools, at the elementary level a teacher is almost always to be a fully trained and qualified teacher before he or she is permitted to teach in a recognised elementary school. This position is today widely accepted in India, but due to an acute shortage of trained teachers it cannot be rigidly enforced in practice.

Secondly, alongside this requirement that an approved course of preparation is essential for all elementary teachers is the emergence in both the U.K. and the U.S.A. of a new conception of the nature and extent of this preparation. Till recently it was believed that a secondary teacher needed to be educated, not trained ; and an elementary teacher trained, not educated. Hence, while the preparation of a secondary teacher extended over four or five years and concentrated on his general education, that of the elementary teacher was completed in two years and concentrated mainly on his professional training. This narrow and unbalanced view no longer prevails. All types of teachers, whether teaching in elementary or secondary schools, need to be both educated and trained if they are to become really effective educators.\* To make this possible in the case of the elementary teacher, his course of preparation has been extended from two years to three in the U.K., and to four years in the United States and equal emphasis is laid on his general education as on his professional training. In fact there is a tendency in both countries to drop the word 'training' because of its restricted meaning and to talk simply of the 'education of the teacher' or 'teacher education'.

The shift of emphasis from teacher training to teacher education represents more than a mere change of terminology ; it embodies a novel and dynamic conception of the central and comprehensive role of the teacher of today. Teaching in the past tended to be identified with "instruction in the elements of the 3 R's" but with our present-day ideas that education is much more than instruction, that it represents the total development of the child, physically, mentally and spiritually, and to a large extent for society, and that it cannot begin or end at school but must continue throughout life, has come the awareness that the education of the teacher, no less than that of the child, must be a complete

and many-sided process of development aimed at producing the right type of person as well as the right type of teacher.

### **Education for the right type of person and teacher**

It is becoming increasingly clear to teacher educators in the U.K. and the U.S.A. and the idea is spreading in India, that if intending teachers are to be transformed into the right sort of human beings and the right sort of teachers, radical changes are necessary in our traditional ideas of teacher preparation. It is, for instance, clearly realised that the teacher cannot be educated in the prescribed two, three or four years at a training college (U.K.) or at a teacher college (U.S.A.). The foundations of the education of the teacher are laid at school ; the walls and superstructure are built in the training college ; and finishing touches are provided by what is called in-service education and training and the actual teaching in the school. A good general education at school and a three-to-four-year course of education and training at a training college equips the teacher with the basic minimum of general education and professional skill for being a good teacher. But in both countries, as also in our country, there is a growing insistence on the fact that unless the young probationer continues to grow and develop through a continuous process of actual teaching experience plus in-service education, he will never blossom into a really first-class teacher. With this idea in mind almost all States in the U.S.A. only grant temporary licences to teachers fresh from the teacher colleges and as such teachers have to continue their education and training at approved evening, winter and summer classes over a certain period of years if they wish to qualify for a permanent licence or to be eligible for promotion. In the U.K. after an elementary teacher leaves the training college, he is on probation for two years during which time he is expected to attend refresher courses and

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\*For reference the reader may see McNair Report on "The Recruitment and Training of Teachers in the U.K." In the U.S.A. numerous studies have been published by the Federal Office of Education and the N.E.A.

after which he is given a permanent licence to teach. But even after this he is encouraged and given generous facilities to attend some of the wide variety of in-service refresher courses organised by the Ministry of Education, the local education authorities and various professional bodies. Evidence that he is thus keen on improving himself counts a great deal when promotions are made.

This dynamic conception of a teacher's education and training as being a continuous process of preparation in school, training college and through in-service courses, is present to some extent in the minds of those responsible for the education and training of secondary teachers in India. The work of the All-India Council for Secondary Education and the establishment of the Extension Service Departments are an evidence of this realisation. But this feeling is hardly visible in the world of elementary teacher training where the idea still persists that a teacher's training begins and ends at the training college whether it be of the basic or the traditional type. It is hoped that the All-India Council for Elementary Education will pay serious attention to this important aspect and sponsor some kind of extension service project for elementary teachers for whom such a project is badly needed.

### **Reorienting the methods of teaching**

Side by side with this trend of giving the teacher a complete and many-sided education to equip himself for the job, there is an increasing emphasis on dynamising the methods of teaching the teacher. For instance, it is clearly realised in both the U.K. and the U.S.A., as also in our own, that teacher education cannot be accomplished only in the lecture hall or the classroom. It will have to take place on the playing fields, in the streets, in the library and common room ; in work and in play ; through individual study, group discussion and tutorial sessions ; above all, it will have to be through rich and many-sided community living. Hence, in the training institutions of both the U.K. and the U.S.A., formal lectures are kept at a minimum.

Individual study is encouraged and every possible use is made of the tutorial system, of planned educative activities and experiences, of informal methods such as seminars, discussion groups, workshops, planned visits to schools, museums, archaeological sites and other educational institutions. In the field of testing the all-important final external examination has been replaced by a continuous dynamic process of evaluation that extends over the entire period of training, and a variety of testing techniques, subjective and objective, are used in an attempt to determine, not whether the student has crammed the right books in educational theory and psychology and knows the right answers to stock questions, but whether he or she has the potentiality to develop with suitable experience and in-service education into a reasonably good teacher.

### **Revitalisation of the curriculum**

Consequent on this realisation, the curriculum of the training institutions—curriculum considered in its widest sense as including all the knowledge, skill, activities and experiences of the student during the period of preparation - has been remodelled on different lines. Much dead weight has been cut out, especially in the professional courses and continuous efforts are made to correlate and integrate not only professional and general subjects, but also classroom and extra class activities and experiences. Discipline under the changed curriculum is less rigid and the student is given much greater latitude in ordering his own life and plan of work. In short, the training institutions are daily becoming more and more like dynamic, cooperative, educative communities.

The revitalisation of the training college curriculum has been accomplished in the U.K. and the U.S.A. but in India the process has just started. Syllabuses are being revised and brought up-to-date. A student's programme of work is less regimented, co-curricular activities are encouraged and the training institutions are being made more like cooperative societies and less like schools. Methods of teaching are also in

a process of gradual change and the much feared final examination is being put in its proper place as more and more emphasis is laid on the total process of evaluation. But much, very much, remains to be done in all these aspects of the life of a training college in our country before it can hope to do as good a job and to produce as good a product as its counterpart in the U.K. and the U.S.A.

### Conclusion

In my article I have briefly mentioned some of the outstanding trends in teacher education in the countries under study. I have, however, omitted a few other trends such as the importance of selecting the right type of trainees for the training

institutions and devising suitable techniques for selection, or the efforts that are being made in both the countries to raise the status of the teaching profession in order to attract the right type of talent, for indeed no training college in any country, however, efficient and well-staffed, can do much if it receives poor quality of human material to work on. In this article my idea is to indicate broadly that teacher education in both the U.K. and the United States is far from being hide-bound and that it is displaying a spirit of healthy self-criticism and a dynamism that are in keeping with the age in which we live. And even in India one can see the stirring of a new life within the tradition-bound walls of our training institutions which augurs well for the future.

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'I will utter what I believe today, if it should contradict all I said yesterday.'  
—Phillips

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# From Our School Notebook

We publish below accounts of individual projects undertaken by various schools. Contributions (which should be typed) for this feature are invited. These should be addressed to the Editor, "Secondary Education," Ministry of Education, New Delhi.

## I

### **A New Experiment** By Thakorlal S. Thakor, Principal, Dewan Ballubhai Madhyamik Shala, Ahmedabad.

ON August 21, 1958 our school launched a programme which consists of conducting the psycho-analysis of its pupils to assist their intelligence, personality and aptitudes for specific subjects with the object of helping them to choose their future careers. In all advanced countries students are screened psychologically for this purpose and there is a psychologist on the staff of practically every progressive institution. Unfortunately, in our country we do not have any plan of screening pupils with the result that even mediocre students getting only 35% to 40% marks in the S.S.C. or any equivalent examination take up courses like medicine or engineering for which they are ill-suited and in which eventually they fail to make good. We also hear many complaints from all sides about the present day low standards of university students. It is with these considerations in mind that we decided to conduct this experiment.

To begin with, the experiment is to be confined to students of Standards VI, VII and VIII. Each student will be tested thrice for three consecutive years so that we can have a fair idea of his mental development and his changing personality. A proper synthesis of the results of the triple tests for three

running years will give us, we expect, a good picture of the pupil's interests, aptitudes and abilities and prove useful for educational and vocational guidance.

The method to be followed is simple. The tests will consist of questions on every day life, simple problems in arithmetic, matching designs, choice of colours etc. covering a complete range of the pupil's mental abilities in regard to his intelligence, application, observation, attitudes and so on. For each pupil the tests will require four hours and their synthesis and evaluation will need six hours more, making a total of ten hours. We propose to test about 1100 pupils under this plan. This screening will not only be a useful guide for vocational guidance; it can also be utilised to correct the defect and disabilities observed in the development of the child's mind, personality or attitudes. If the tests are well conducted and if the cooperation of parents is fully assured, the mental diagnosis can be utilised to seek remedial measures for the backward or the problem child.

Our school maintains a cumulative card recording the progress of every pupil. The results of these mental tests will be recorded in printed cards and they will be available for inspection by the children's guardians. The experiment will cost the school a rupee per pupil a year. All expenses in conducting the experiment will be borne by the school. We have launched this experiment with the hope that it will open the way to advanced research in this field in our country.

## II

**For Better Understanding** *By K.C. Vyas, Headmaster, New Era school, Bombay.*

THE New Era School, Bombay has planned a project on "Inter-Community Living and Inter-Regional Understanding Between Gujarat & Maharashtra".

The general objective of the project is, as its title suggests, to develop inter-regional understanding which is an essential part of harmonious living in a cosmopolitan society. Its special objectives are : (i) to make pupils collect information and facts about social, geographical and historical aspects of inter-community living in Gujarat and Maharashtra; (ii) to help them establish contact with the actual living conditions of communities in these two regions ; (iii) to develop in the pupils an appreciation and understanding of the cultural heritage of the two communities and (iv) to help them understand the interdependence of communities.

This project will cover the study of three subjects namely Geography, History and Literature. In Geography the students will take up the study of the people, their way of life, habits, food, clothing, shelter ; and geographical environments, occupations, products and industrial centres. In History the pupils will study the contribution of both the communities towards the national struggle for freedom. To this end they will study the lives of great personalities of Gujarat and Maharashtra like Ranade, Gokhale, Tilak, Karve, Mahatma Gandhi, Vallabhbhai Patel, Dayanand Saraswati, Ravishankar Maharaj etc. In Literature the students will be introduced to a few Marathi books and stories translated in Gujarati.

For purposes of work, the students will be divided into study groups. Those with academic aptitude will collect information

on different aspects of community living in Maharashtra and Gujarat from reference books and other sources and write essays and stories from this material. Those who are good at painting and model-making will form a group which will prepare charts, maps, pictures and models of forts, homes, dresses etc. of Maharashtra and Gujarat.

As far as practical work is concerned, every pupil will have to conduct an interview. Before the interview every pupil will prepare his own questionnaire which will include questions on social and economic, cultural and daily living habits of the communities. This will enable each member of the class to collect his information through direct contact. This will be followed by visits of groups of pupils to different places to observe the actual living conditions of the people and live with them for a short period. They will visit houses, shops, streets, bazaars, temples etc. Finally a service-cum-contact camp will be organised and social work will be undertaken in an under-developed area or a village. The students will undertake such work as cleaning of streets, spraying D.D.T., giving first aid etc. The students will also participate in festivals and give dramatic performances in the localities they visit.

The evaluation of the project will be conducted in the following way. (1) The students will be given two aptitude tests, one before the project and one after. The results of these tests will be compared to find out the interests of the students. (2) Each group will be required to submit a detailed report of its plan of work during the period of the project and (3) An Evaluation Day will be held at the end of the year when the pupils will organise an exhibition of their project and display charts, models, pictures and essays and stories prepared by them in the course of their work.

# Activities at the Centre

## Central Advisory Board of Education

It has been decided that the next Session (26th) of the Central Advisory Board of Education will be held at Madras from 12th to 16th January, 1959.

## Central Research Advisory Committee

The next (second) meeting of the Central Research Advisory Committee will be held shortly to discuss ways and means of encouraging and expanding research activity in the field of Secondary Education.

The following amounts were sanctioned during the quarter for research in problems connected with Secondary Education.

1. D.A.V. College, Dehra Dun.	Rs. 2,654
2. Indian Institute of Education, Bombay.	Rs. 4,950
3. Central Institute of Education, Delhi.	Rs. 10,705
4. Meerut College, Meerut.	Rs. 3,123
5. Thyagaraja College of Pre- ceptors, Madurai.	Rs. 3,824
6. Viswa Bharati, Santiniketan.	Rs. 3,002
7. Indian Institute of Technology, Kharagpur.	Rs. 25,587
8. David Hare Training College, Calcutta.	Rs. 2,800
Total :	Rs. 56,645

## Free Education in the Andamans

The Government of India have decided that children of ex-convicts and tribals in the Andamans and Nicobar Islands may be exempted from the payment of tuition fees upto the High school stage in the various schools of the Islands.

## Exemption from payment of fees in Tripura

The Government of India have exempted students belonging to Scheduled Castes, Scheduled Tribes and other Backward Classes in indigent circumstances from the payment of tuition fees at all stages of education in Tripura. This is with retrospective effect from April 1954.

## Central Bureau of Textbook Research

*Drafting of syllabus for Social Studies*

The Central Bureau of Textbook Research has completed the drafting of the Social Studies syllabus for Delhi Schools. In most States the problem of Social Studies has been a difficult one. "Social Studies" is commonly understood as a combination of History, Geography, Civics and Economics. All these subjects are given as isolated facts in the same chapter or in the same lesson. Therefore neither the teacher nor the children can understand or see the close connection between these subjects. Because of the very great difficulty felt in teaching these isolated subjects under a single heading

'Social Studies' some States like Bombay and Madras have gone back to the original classification of History, Geography and Civics. The Central Bureau of Textbook Research has treated the theme of Social Studies as 'The Story of Man.' In dealing with this story as an integrated story running from the first to the eighth classes, they have traced the story from the historical, geographical, economic and other points of view, cutting across established subject barriers to get the meaning of the subject as a whole. . In dealing with the story sometimes one or the other subjects, in a single class, have had to be sacrificed. The syllabus is now being tried out through actual lessons in some selected schools in Delhi.

The methodology adopted for the drafting of the Social Studies was the same as the methodology adopted for the General Science syllabus. It was developed as a group project with the cooperation of teachers, school principals, inspectors of schools, training college principals and teachers and subject experts. It is now proposed to introduce it in some Delhi Schools.

#### *Teaching of the United Nations in Schools*

Another experiment which the Central Bureau of Textbook Research is undertaking in the next few months concerns the teaching of the United Nations in schools.

#### *Publications*

The Bureau is shortly publishing analysis sheets in language, history and general science which would be an exhaustive means of covering the objective data concerning these subjects in textbooks. The score cards which are objective measuring instruments for use by the textbook committees to evaluate textbooks in language and general science for primary schools have been printed and distributed.

#### **Central Institute of Education**

A week-end Seminar on "Problems of Implementing a Structural Syllabus in English" was held at the Institute on 9th

August, 1958. Over eighty teachers from Delhi schools participated in the Seminar.

Dr. Noonan of the Institute of Education, London, inaugurating the Seminar stressed that language is not an accumulated body of knowledge, but a skill to be acquired. "Language uses a complicated system of tools to make meaning clear and it is the use of the tools that children must learn. Methods are important but they must spring out of the nature of the material, that is, the language itself. Hence a systematic presentation of the structures of the language will enable pupils to gain a command of the language. An oral foundation is absolutely essential." The Seminar later divided itself into four groups and discussions were held on the implications of the new approach to English teaching.

On 11th August, Dr. Noonan gave a demonstration lesson to class VI of the C.I.E. Basic School, which had just begun the learning of English. He demonstrated very successfully the methods of teaching the structures showing action in the present continuous tense, e.g., "I am running"; "I am jumping"; "I am putting one hand on my head," etc.

Dr. Gattegno, delegate to the Unesco Seminar on Education in S.E. Asia, gave an interesting demonstration on 26th August, 1958 at the Institute premises of an economical way of teaching, reading and writing a phonetic language to those who already know the language. He showed how he had worked out a simple method of teaching the 231 characters of Amharic to adult learners of the language by simplifying the learning material and by getting the active cooperation of his pupils during the process of learning to read the script.

#### **Central Bureau of Educational and Vocational Guidance**

##### *Professional Course in Guidance*

The Bureau is conducting a professional course of 10 months' duration for Counsellors and Directors of Guidance since July 1958. Three nominees of State Governments, four lecturers of Teachers' Colleges, four teachers

## ACTIVITIES AT THE CENTRE

from Higher Secondary schools and one teacher from a senior basic school have joined this Course.

The Course is organised in three distinct but related parts—(a) theoretical instruction and written work covering (i) developmental psychology (ii) psychological and educational measurements and evaluation (iii) curriculum development and organisation and (iv) procedures and principles of guidance and counselling psychology, with ancillary courses relating to education system, vocational education, occupational and employment market information including job analysis and descriptions and youth employment in selected countries (b) practical training in the preparation of analytic and descriptive aids in guidance and counselling, and in job analysis and compilation of occupational and employment market information and (c) field training in schools in the use of guidance and counselling aids and in the counselling interview.

### Seminars and Conferences

(i) A week-end seminar on educational and vocational guidance in secondary schools was organised by the Extension Services Department of Meerut College, Meerut, under the direction of the Central Bureau on the 28th, 29th and 30th July, 1958. Over 30 heads of institutions and a number of lecturers of the Education Department of the Meerut College and student-teachers participated in the Seminar.

The seminar dealt with educational and vocational guidance and as an integral part of the secondary school system, organised in three distinct but inter-connected programmes of general, curricular, and vocational orientation, and vocational guidance leading to after-school placement.

The feasibility of assessing pupil needs and problems at the beginning and end of secondary schooling and of teacher participation in the work of building a 'specimen test-items' bank were discussed.

(ii) A Conference on guidance and student

personnel work in Universities was held by the Bureau from 27th to 29th June, 1958. It was attended by the representatives of the Universities of Delhi and Viswa-bharati.

The Conference recommended: (a) the introduction of guidance and student personnel services in the Central Universities (b) the holding of an orientation-cum-training course for the selected teachers of these universities during the next university recess and (c) the visit by a faculty of universities professors from abroad who have specialised in guidance and student personnel work for consultation and advice in regard to the implementation of programmes of guidance and student personnel work in the Central Universities.

### Guidance Activity in Schools

Ram Roop Vidya Mandir, a premier Higher Secondary School of Delhi has started a whole-time guidance unit for providing general, educational and vocational guidance to students of standards VI to XI. The guidance programme has been prepared and is being implemented in co-operation with the Central Bureau.

### NEWS AND NOTES FROM ALL-INDIA COUNCIL FOR SECONDARY EDUCATION

### Extension Services

Quarterly grants amounting to Rs. 2,03,300/- were sanctioned to the Extension Services Departments of 43 Training Colleges during the quarter under report. The Governments of Andhra Pradesh, Mysore and West Bengal have sanctioned the continuance of Extension Services Departments in the College of Education, Osmania University, Hyderabad, Teachers' College, Mysore, and Vinay Bhawan, Visva Bharati, Shantiniketan, respectively till March 1961, and have also undertaken the financial liability to the extent of Rs. 6,000/- per annum for meeting the cost of T.A. and D.A. of teachers to be deputed for attending the Extension Courses etc.

## SECONDARY EDUCATION

### *Seminars and Workshops*

The Council organised the following seminars during the quarter.

Type of Seminar	Director	Venue & Dates
1. State Seminar of Head-masters and Education Officers.	Principal, Government Training College, Puddukkottai.	Govt. Training College, Puddukkottai, (Madras) (May 19—June 2)
2. State Seminar of Head-masters and Education Officers.	Principal, Government Training College, Kurnool.	Government Training College, Kurnool, (Andhra) (May 22—June 5)
3. State Seminar of Head-masters and Education Officers.	Principal, Government College, Khandwa.	Prantiya Shikshan Mahavidyalaya, Jabalpur.
4. State Seminar of Head-masters and Education Officers.	Principal, Teachers' College, Srinagar.	Gulmarg (Kashmir) (10th July to 25th July).
5. Seminar-cum-Training Course for Commerce Teachers from the States of Madhya Pradesh, Bihar, Rajasthan, Punjab and Tripura.	Head of the Commerce Department, Delhi Polytechnic, Delhi.	Delhi Polytechnic, Delhi (2nd June to 6th July).
6. State Seminar of Head-masters and Education Officers.	Principal, Post-Graduate Basic Training College, Chandigarh.	Chandigarh. (21st July to 4th August)
7. Subject Teachers Seminar in Social Studies.	Principal, State College of Education, Patiala.	State College of Education, Patiala, (21st to 30th July).

### *The Work of the Examination Unit*

Evaluation Workshops were conducted during the period at Meston Training College, Madras, (3rd June to 7th June), St. Christopher's Training College, Madras, (9th June to 14th June) and at Amritsar (11th June to 16th June), Allahabad (4th June to 9th June), Ranikhet (9th June to 18th June), Bombay (12th to 22nd June), and Bhagalpur (16th to 22nd June). These workshops were organised by various Evaluation Officers of the Council.

A workshop of the Evaluation Officers and of the ten trainees who have returned from the U.S.A. was conducted at Bhopal

from the 25th June to 4th July 1958. The purpose of the workshop was to review the work of evaluation so far done, to study the syllabi and question papers received from different State Departments and Boards of Education with reference to the aims of the Examination Unit and plan out the programme of action for the coming year.

An Evaluation Workshop of Subject Teachers for the States of Mysore, Madras, Andhra Pradesh, Kerala, Bombay and Orissa was held at Saifabad (Andhra Pradesh) from the 11th to 17th August under the auspices of the All-India Council for Secondary Education. This was con-

## ACTIVITIES AT THE CENTRE

ducted under the guidance of Dr. B.S. Bloom and its purpose was to help the teachers in preparing the *Evaluation tools* in their respective subjects to test properly the educational growth and development of the pupils.

Another such workshop for teachers of the States of Assam, West Bengal, Bihar, Uttar Pradesh, Rajasthan, Madhya Pradesh and Punjab was organised at Chandigarh

from the 25th to 30th August, 1958.

The Evaluation Unit started functioning in full strength from 1st August, 1958.

### *TCM material received and supplied*

Fifty one cases of T.C.M. books were despatched to 1st and 2nd flights of Extension Services Departments during the period under report.

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"It is the supreme art of the teacher to awaken joy in creative expression and knowledge."

Albert Einstein

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# *Around the States*

## **Bihar**

### *Multipurpose and Higher Secondary Schools*

The State Government has published the courses of studies for the first Higher Secondary School Examination which will be held in 1960. A number of Government High schools, including 13 High Schools for boys (12 at different district headquarters and one at Saraikella), 8 High Schools for girls (all at different district headquarters) and 9 Sarvodaya High Schools (Post-basic High Schools in rural areas) have been upgraded into Multipurpose Higher Secondary Schools with effect from June 16, 1958.

### *Improving Science Teaching*

With the help of a grant from the All-India Council for Secondary Education, a Science Club has been set up by the Department of Extension Services, Teachers' Training College, Turki (Muzaffarpur).

234 non-Government High Schools were sanctioned grants at the rate of Rs. 1,000/- each for science equipment in 1957-58.

### *Teaching of crafts*

In order to improve the standard of teaching of crafts in the State, a Craft Wing has been attached to the Reformatory School, Hazaribagh, for the training of teachers in Crafts viz. weaving, woodwork, metal work, blacksmithy, tailoring, dyeing, printing and the electrician's trade. At the Secondary level, eight teachers from Sarvodaya High Schools and twelve teachers from the traditional High Schools were trained in different crafts during 1957-58. During 1958-59, ten teachers from Sarvodaya

High Schools and 30 from the traditional High Schools have been deputed for training in crafts there. Four teachers of Agriculture and five teachers of Commerce were also deputed to participate in the Seminar-cum-training courses at Ludhiana and Delhi respectively, which were organised by the All-India Council for Secondary Education this year.

### *Training Seminar and refresher courses for teachers*

Short Training Courses in general methods for untrained graduate and non-graduate teachers of non-government High Schools were held at the Divisional Headquarters from 15th May to 30th June, 1958.

### *Educational and Vocational Guidance*

The State Government has appointed 13 School Counsellors and deputed them for one years' training at the Educational and Vocational Guidance Bureau, Bihar. Five School Counsellors who completed their training were posted to five Government High Schools for boys and girls at the district headquarters.

## **Delhi**

### *Expansion of Educational facilities*

Besides 32 Middle and Higher Secondary Schools opened and upgraded on 1st April, 1958 by the Directorate of Education, another 6 Middle Senior Basic Schools were upgraded to the Higher Secondary standard after the summer vacation. With the opening of these 38 schools all students at the Middle and Higher Secondary stage in

**Delhi** are assured admission.

### *Refresher courses for teachers of Higher Secondary Schools*

To inform teachers of Higher Secondary Schools about the latest developments in their subject-fields and acquaint them with the modern trends and techniques in Secondary education, the Directorate of Education propose to hold three refresher courses in the following subjects during October-November, 1958.

- (i) English
- (ii) Physics
- (iii) Drawing.

Each Refresher Course will be of 6 to 8 weeks' duration. These will be organised in collaboration with the University of Delhi and Delhi Polytechnic. Thirty to forty teachers of Higher Secondary Schools will participate in each Refresher Course.

### **Madhya Pradesh**

In keeping with the policy of the Government, 65 High Schools have been converted into Higher Secondary Schools so far. The State Government propose to convert all High schools in the State into Higher Secondary Schools within the next two years.

The State Government has covered all the Tehsils in the State in so far as the provision of High school education is concerned. Also all the High Schools in the State now have facilities for teaching science subjects.

Secondary school examinations in the State were formerly conducted by three Secondary Education Boards. These examinations are now controlled by two Boards only. The State Government is proposing to introduce a Bill in the State Legislature shortly to bring about the Secondary examination system under one Board.

standards in Secondary Schools the State Government has held a number of seminars and refresher courses at different places in the State. About 700 teachers, members of the staff of the Training colleges and educational inspectors participated in such seminars during the last year.

### **Madras**

#### *The Pilot Project Co-ordination Scheme for Better Education*

To improve existing conditions and extend educational facilities, the State Education Department embarked last year on a new programme called "the Pilot Project Co-ordination Scheme". The purpose of the project is (i) to weed out the deficiencies in the school system (ii) to provide additional facilities for better functioning of schools and (iii) to elicit public cooperation and voluntary contribution. The programme works in the following way :—

At the instance of the Director of Public Instruction a preliminary and exhaustive survey of the Kadambathur Block area in Chingleput District was conducted and the requirements of every school were ascertained and listed. After that the teachers met the local people and told them of the various requirements of the schools and appealed to them to meet these needs from within their resources. Their response was encouraging.

After completing the preliminary survey and securing public cooperation, all the teachers in that area met the village leaders in a conference at Kadambathur on February 2, 1958 under the presidentship of the Director of Public Instruction. Donations were handed over by the donors in person at the conference. Books, clothing, slates, utensils, teaching aids, etc. given by the villagers were distributed on the spot. Works initiated with departmental guidance, costing more than Rs. 9 lakhs have been volunteered by the public at seven centres and more than Rs. 3 lakhs have been contributed instantaneously on the spot.

To improve academic and general

## SECONDARY EDUCATION

The Pilot Project Coordination Scheme experimented at Kadambathur area was a great success. It was followed by similar conferences held at various places, both in

the National Extension service and non-National Extension service areas as detailed below :

<i>Date</i>	<i>Name of place</i>	<i>Works Undertaken</i>	<i>Public contributions on the spot</i>
20-2-58	Kadambathur (Chingleput)	Rs. 15,000	Rs. 1,300
26-3-58	Thiruvellore (Chingleput)	25,000	13,000
25-7-58	Valliyoor (Tirunelveli)	1,27,000	28,000
28-7-58	Thisayanvilai (Tirunelveli)	1,33,000	41,000
16-8-58	Valathi (South Arcot) Melmalayanur Block	1,24,000	1,22,287
20-8-58	Poonamallee (Chingleput)	1,26,000	28,967
23-8-58	Thiruvethiyoor (Chingleput) (non-Block area)	3,80,000	66,933
		<hr/> 9,30,000	<hr/> 3,01,487

The new approach to equip schools through public cooperation has evoked considerable interest and enthusiasm. What exactly the scheme will achieve can be known only after a year or so.

### Mysore

There are at present 570 high schools in Mysore State. Of these 63 have been converted into Higher Secondary schools and 60 into Multipurpose High Schools under the Development Programme of the Education Department under the Five-Year Plans. The multipurpose schools offer 79 courses distributed as follows : Agriculture 34 ; Home Science 13 ; Technical 12 ; Commerce 9 ; Science 7 ; Fine Arts 2.

The new curriculum for the four-year Higher Secondary course after 7 year-course of integrated primary stage is being finalised. The State Government intends to introduce the new syllabus in the VIIIth class of all Secondary schools in the State during the year 1959-60.

### Orissa

*Taking over the management of aided high schools*

The State Government usually sanctions

a grant-in-aid to the extent of two-thirds of the net deficit incurred by a High school in a particular year. With effect from the current session the State Government has taken over the management of 64 aided High schools in the State and the entire deficit of each school will be borne from the Government funds. The schools were selected on the basis of number of students in the Upper four classes and on the basis of their success at the High School Certificate Examination for the last few years.

### Secondary Education

The higher secondary syllabus has been introduced in 3 High Schools with effect from the current academic session. This is the first batch of Higher Secondary schools to be converted into Higher Secondary Multipurpose schools in this State.

Six new Girls' high schools in different parts of the State were opened during the current academic session. This brings the total of new Girls' high schools opened during the first 3 years of the Second Plan period to 9. The revised target for this period is 15.

**Board of Secondary Education, Orissa**

Under the auspices of the Board of Secondary Education, Orissa, two refresher courses, one in General Science and the other in English were held in June, 1958. The Refresher Course in General Science was intended for the Science teachers of High schools and 30 Science teachers from different parts of Orissa attended the course. Apart from academic discussions and conducting experiments in the laboratory, the participants visited places of scientific interest in the vicinity of Cuttack.

The other Refresher Course (in English) was attended by teachers of English from 32 High schools of the State. All participants were of the view that the proper learning of English was important for improving scientific and technical knowledge.

The Board of Secondary Education, Orissa, has prescribed the courses of Studies for the High School Certificate Examination, 1962, and Higher Secondary School Certificate Examination, 1963. The Board has also prepared the syllabus in English for Classes VII and VIII on the structural basis.

Eight new High schools in the State were given recognition.

**Rajasthan**

During the first two years of the Second Plan period Rajasthan has raised 210 Primary schools to Middle schools and 40 Junior Basic schools to Senior Basic schools. The number of Higher Secondary schools either raised from Middle schools to Higher Secondary schools or converted from High schools to Higher Secondary schools during the period is 65. The distribution of Secondary schools in the State is as follows :—

Middle Schools (Boys and Girls)	1,061
Senior Basic Schools (Boys and Girls)	40
High Schools	238

**Higher Secondary and Multi-purpose Schools (Boys and Girls) 90**

The State Government raised two Training Institutions to B. Ed. standard and started one Training College of Physical Education preparing students both for Diploma and for Certificate Courses. Extension Training Centres were allotted to two Post-graduate Training Colleges.

New promotion rules in examinations have been promulgated by the State Government. These rules lay stress on day-to-day work rather than on annual examination and require that promotion of students from one class to the other should be based on their achievement in the tests and in the half yearly and annual examinations.

**West Bengal**

The scheme for imparting free education to all the girl students reading in classes V to VIII in rural areas in West Bengal has been finalised and implemented from April 1958. The total cost involved on this scheme in the Second Five Year Plan will be :

1958-59	Rs. 9.07 lakhs.
1959-60	Rs. 9.97 lakhs.
1960-61	Rs. 10.97 lakhs.
Total	Rs. 30.01 lakhs.

**Uttar Pradesh**

*The School Psychological Service*

The school Psychological Service which came into existence in the State in 1947, is now functioning at three levels, namely, the State level (Bureau of Psychology, U.P., Allahabad), the regional level (five Regional Psychological Centres at Meerut, Bareilly, Kanpur, Varanasi and Lucknow) and the school level (School Psychologists in Multi-purpose schools).

During the Second Five Year Plan, the State Education Department has made pro-

vision for the appointment of 25 full-time school psychologists at 25 multipurpose schools. Ten of these school psychologists are already functioning at Government Higher Secondary Schools for Boys at Jhansi, Moradabad, Faizabad, Gyanpur, Deoria, Pilibhit and Etawah, and for Girls at Faizabad, Bareilly and Gorakhpur. Five more are going to be appointed shortly at Government Higher Secondary Schools for Boys at Rampur, Lansdown, Almora and Etah and for Girls at Naini Tal. The remaining ten would be appointed in the next two years. Trained graduate teachers, who successfully complete a full-session training course in Guidance Psychology at the Bureau of Psychology, U.P., Allahabad, are appointed as school psychologists.

The main functions of the School Psychological Service are : (a) to provide educational guidance and counselling to 'Delta' class students (i.e. class VIII) with a view to allocating them to proper diversified secondary educational courses available in multipurpose schools, namely, Literary, Scientific, Agricultural, Commercial, Constructive, Technical and Aesthetic, (b) to provide vocational guidance and counselling to High School leavers, and (c) to organise remedial teaching for the backward children and enriched educational programmes for the gifted ones.

The guidance and counselling programmes are organised on group basis and are built on relevant background information from the home and the school combined with a wide variety of psychological tests of general intelligence, mental abilities, aptitudes, interests and personality make-up which have been developed and stand-

ardized at the Bureau. The border-zone and maladjusted cases are also taken up for individual diagnostic testing and counselling. The guidance reports, which are drawn up for each student individually, are submitted to the Principals and, through them, also to the guardians along with the annual progress reports. Copies of these reports are also made available to Employment Exchanges, if and when called for. About 5000 students of class VIII from about 50 Higher Secondary Schools and 2000 students each of classes X and XII from about a score of schools get the benefit of guidance and counselling services every year.

Preliminary follow-up studies indicate unmistakably that those students who accept Bureau's advice and act up to it fare distinctly better than those who act contrary to it. The psychological service, thus rendered, is being increasingly appreciated by students, parents and teachers alike as is evident from the fact that more and more schools are now keen to organise guidance and conselling services in their schools and the number of students seeking guidance is increasing rapidly.

#### *Instructional Projects in Schools*

Extension Services Department of the Government Central Pedagogical Institute, Allahabad, has launched a programme of intensive work with a view to carrying out simple instructional projects and to follow up in the schools the work of teachers who have participated in different activities of the Department. Under this programme the following projects have been undertaken :

#### *Title of the Project*

1. Improvement in English Spelling in classes VI, VII & VIII.
2. Teaching of English Grammar in classes IX and X.
3. Improvement in English Spelling.
4. News Bulletin.
5. Improvement in Evaluation Techniques (for class IX).

#### *Institution*

Anglo-Bengali	Intermediate	College,
Allahabad.		
Anglo-Bengali	Intermediate	College,
Allahabad.		
Kesarwani Intermediate College, Allahabad.		
Kesarwani Intermediate College, Allahabad.		
Majidia Islamia Intermediate College,		
Allahabad.		

- |   |  |
|---|--|
| <b>6. Vocational Guidance.</b>  | Jamuna Christian Higher Secondary School,<br>Allahabad (in collaboration with the<br>Bureau of Psychology, Allahabad). |
| <b>7. Dramatization Activities for the whole school through class Literary Societies.</b> | Jamuna Christian Higher Secondary School,<br>Allahabad.  |
| <b>8. Teaching of English Grammar in the Junior High School stage.</b>                    | National Intermediate College, Handia.   |
| <b>9. Teaching Correct Geometrical Concepts in class IX.</b>                              | M.O. Intermediate College, Rampur.   |
| <b>10. Improvement in English and Hindi Spelling in the Junior High School stage.</b>     | Tilak Intermediate College, Kotwa.   |
| <b>11. Improving Reading Habits of Pupils (to start in class VI).</b>                     | Gomti Intermediate College, Phulpur.   |

### *Manpower in Education*

The Government of Uttar Pradesh has appointed a study group to investigate into the problem of educational manpower required for the Second and subsequent Five Year Plans. The study group which has the Deputy Secretary in the Education Department as Convener and top-ranking educational administrators and scientists as members will study the ways and means of extending facilities of science studies upto the intermediate standard in the institutions of Uttar Pradesh. It will study requirements of persons with intermediate science qualifi-

cations in the context of technical and professional education. The State Government had already undertaken a project of introducing General Science in 1000 lower Secondary schools by the end of the Second Five Year Plan. The present study group is likely to give a further fillip to science studies at the Secondary stage. It is in fact one of the four study groups proposed to be formed. The other three study groups are for (i) Engineering personnel including craftsmen (ii) agricultural personnel including veterinary personnel and (iii) the medical personnel.

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"A man that only translates shall never be a poet ; nor a painter that only copies ; nor a swimmer that swims always with bladders ; so people that trust wholly to others' charity and without industry of their own will always be poor."

—Sir W. Temple

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# Window on the World

## AUSTRIA

### *A School trip to England*

IT has become a tradition for Vienna pupils to make a 5-week trip to England every year through the cooperation of the School-home Association of the Vienna Urban School Council, the Anglo-Austrian Society in London, and the Austrian Committee for International Student Exchange. This year's trip was the sixth of such visits and numerically the largest, with its 90 participants.

The pupils were divided into 5 groups, each under the supervision of a teacher, and assigned to English families in Birmingham, Brinsley, Manchester, Nuneaton, Pickering, Smethwick and Solihull.

In order to make the trip advantageous to the pupils both from a language and social standpoint, pupils of the upper primary school who had an above average school record, with unprejudiced minds and suitable social assets, were selected for the trip—those who could derive the most benefit both linguistically and intellectually from such contacts.

As a means of increasing fluency in the use of the English language, *Club Afternoons* were conducted with the groups. Particular emphasis was placed upon ordinary conversational English and familiarity with English customs. The pupils practised Austrian folk songs and dances, with a view to entertaining their English hosts and serving as goodwill ambassadors. They provided themselves with dirndl dresses and leather trousers,—native costumes which they donned for formal and public receptions arranged by the mayors, at garden parties and at school

entertainments.

The group leaders delivered their pupils to the designated host-parents and visited them periodically. All problems that presented themselves were discussed with the local committees who had made all advance arrangements for the pupil's visits.

The pupils, on their return, greatly enliven their classes by their accounts of their travel experiences. They maintain contact and cement friendship with their hosts and English acquaintances by means of correspondence, and their command of English is greatly benefited. Nearly all participants were invited for a second visit, and Vienna pupils in turn invited their English friends to visit them. All this contributes in some measure to foster international understanding.

This year, as in former years, the pupils put on an English Evening, and an exhibition, which, by means of films, songs, dances and skits, portrayed some of the experiences of their trip. This also served in a measure to express their gratitude for an unforgettable trip to those who had made the visit possible.

(Foreign Education Digest)

## FRANCE

### *A "Children's Republic"*

VERCHENEY, in southern France, is an unusual community. Its population consists of 100 citizens, almost all of whom are boys and girls between 10 and 16. They run the community, vote their own budget and by-laws, and maintain a freely accepted discipline. After school hours they build new houses, till the fields, or tend the cows and poultry, while those who do not care

for farming, work in the printing shop or learn to weave.

This village was founded by Robert Ardouvin, who, in 1946, as a young ex-Marquis, was disturbed at the sight of gangs of hungry, ragged orphans, roaming the streets of Paris, and living by petty thieving and begging. These children repeatedly ran away from the security of the orphanges whose impersonal officialdom and routine they found intolerable. Ardouvin conceived the idea of providing these children with a real home and the sense of belonging somewhere. The children responded by forming a "Children's Republic," governed by themselves through annually elected officers, the older ones caring for the younger.

Ardouvin had no money, no social welfare training, no official support. But a philanthropist gave Ardouvin the ghost village of Vercheney with 300 acres of fallow land and the children themselves repaired the ruined houses and brought the land under cultivation. In order to accommodate a new crop of orphans resulting from the Indo-Chinese and Korean wars the village was enlarged under a scheme sponsored by Unesco. The school provides standard elementary courses and continuation classes sandwiched with agriculture, printing and weaving.

Ardouvin's experiment has already equipped some 350 lawless waifs to take their place in the world as farmers, skilled workers and useful citizens with a new hope in life and a new sense of responsibility.

(Foreign Education Digest)

## GERMANY

### *The Role of National Libraries*

IN September delegates from twenty-six European countries took part in a symposium organised by Unesco in Vienna to outline the tasks of national libraries and to exchange views on administrative, legal and other aspects of this work.

The organizers pointed out that a national or central library is not only the nerve-centre of a country's library systems; it plays a vital role in cultural exchanges between nations. Among its most important functions are the preservation for posterity of the whole of a nation's output of books, and the unification of bibliographical work.

The aim of the meeting was not to draw up a plan for the ideal national library but to define the services it must perform in each country both on the national and international level. Its scope was limited to the European region where institutions had grown up in the same cultural atmosphere and hence it was easier to evolve a common basis for discussion.

The work of the symposium fell under three main headings which were discussed in detail by three working groups. The first was the organization of national librariest including their place in national library systems, services which should be given and administrative problems. The second concerned bibliographical activities, including cataloguing and classification. The third dealt with inter-library cooperation, both on the national and international level, and covered preparation of statistics on libraries and book production, exchange both of publications and personnel and international cooperative acquisition of material.

(Unesco News)

### *The German Apprenticeship Experiments*

WHEN German industry once more returned to full capacity, employers found that most of the boys entering industry were amazingly ignorant. Their general education had been badly neglected, they were weak in spelling and arithmetic, and had not been taught how to concentrate. The task of training these youths and making skilled craftsmen of them was a formidable one. Some educationists recommended a complete review of the German educational system, but no agreement could be reached.

In April 1947, a large industrial (furniture) firm in Wurttemberg, introduced an interesting apprenticeship reform of its own. The scheme, while retaining the usual method of teaching manual skills relating to cabinet making, introduced courses in general education—a complete innovation in Germany, which caused some apprehension on the part of parents and foremen lest manual and technical training might suffer.

The first year of apprenticeship covers 48 hours a week, no less than 28 hours to be given to general educational subjects and some instruction in art, leaving only 20 hours for technical training. In the second year the time allotted for general education is reduced from 28 to 26 hours a week, and in the third year to 22 hours. The management maintains that an 8-hour day imposes too great a strain on boys aged 14. Another argument in support of the scheme is that in the teaching workshops of large firms (as opposed to apprenticeship training by individual craftsmen or by small firms) messenger and other incidental services are abolished, thus leaving time enough for practical training. Although apprentices have to work hard under the revised training scheme, strain can be easily avoided by finding the right equilibrium between work at the bench and study. It has been found that this new method of training completely eliminates monotony of work. The quality of work, moreover, visibly improves under the influences of the educational and especially the artistic stimulus. The boys show more interest in their jobs and even work faster. The examination (trade test) of the first group of 12 apprentices trained under the above scheme proved a complete success. Not only did they win the first places among 160 apprentices in their own craft—cabinet making—but their average performance surpassed that of all the other trades represented. Subsequent years showed identical examination results, and all opposition to the new scheme has ceased within the plant concerned.

Due to the demand for persons to fill positions of responsibility at lower and

medium levels in German industry, apprenticeship reform is of particular importance. There is a serious lack of qualified foremen with a sense of social responsibility toward their men.

In addition to offering general education, the courses outlined have also steadily improved the method of technical training. Many apprenticeship schemes disregard the fact that the technical knowledge expected of the boys in the initial stages of training is now considerably higher than formerly. The boy leaving school is faced with a highly mechanized world in industry and cannot grasp the complicated machinery confronting him—a difficulty much more widespread than is generally realized. Hence the need for induction courses to ease the transition from school to industry.

The second experiment is that of an interesting training scheme now in operation in a chemical plant in the Ruhr, with a staff of over 3,000 which trains apprentices for 10 different categories of employment. The course covers three and a half years. Selection according to special aptitude takes place on completion of the first year.

The general subjects for the first year include astronomy, oceanography, climatology and menschenkunde (study of mind), and, in the two following years history and geometry. In the final year pupils are given opportunities to improve their knowledge of current affairs. They are also taught to speak clearly and are encouraged to read classical and modern literature. Art instruction is given throughout the course, and aims more at developing tastes and the appreciation of art. The teaching of drawing and painting is of secondary importance only.

(Foreign Education Digest)

## KOREA

### *Korea's School for Young Fishermen*

ON a remote rocky peninsula in the south of Korea, the Yosu Fisheries School is providing a course for the young

men of a country which, for centuries, has derived its main protein diet from marine products.

Founded forty years ago, the Yosu Fisheries School was occupied by troops during the war. After hostilities ceased, it was more important than ever to restore and modernize the school to meet the needs of the expanding fishing industry and the population's demand for more food.

United Nations Korean Reconstruction Agency (UNKRA) took over the reconstruction of the school under its programme to establish vocational training centres in the major cities of Korea. The building was restored, an ice-making plant installed and put into operation, and a model cannery set up, capable of turning out fifteen cans a minute.

During the three-year course, the boys at the school live a half-sea, half-land existence. Two fifty-ton trawlers are used for basic training on how to catch, handle and ice-pack fish. A normal catch weighs about 2,500 lbs, with as many as thirty-five different varieties of fish.

On land, activities include the breeding of fish in a hatchery in the school grounds, tending an oyster bed on a nearby island and preparing seaweed for food or fertilization purposes. In class, the boys study such subjects as mathematics, chemistry, English, fishing techniques, navigation, economics and fish marketing. At the end of the course, they are fully qualified either to join the fishing fleet or to enter one of the various industries related to the fishery trade.

(Unesco News)

## POLAND

### *Poland's Floating Museum*

PEOPLE in provincial cities along the banks of the Vistula river in Poland who have little opportunity of visiting the capital and its big museum, are this season to receive a visit from a novel kind of art exhibit : a floating museum. A pleasure

steamer, the "Golden Duck", has been specially equipped to house some 200 items from the Warsaw Museum of Popular Art and Culture, on Africa, Indonesia, Oceania and the Americas.

Big photographic panels illustrating the life, customs and architecture of these areas have been installed on the upper deck of the ship, while the exhibition itself, arranged on the lower deck, includes weapons from Africa, jewellery made from shells, statuettes carved by Eskimos, wooden spoons and combs, and dancing masks from Africa, marionettes used in Indonesian shadow plays, etc.

The "Golden Duck" has already made six trips down Poland's waterways carrying its consignments of treasures, and each time its visit is eagerly awaited by the people of the riverside cities.

(Unesco News)

## UNITED KINGDOM

### *Day School for the Maladjusted—An Oxford Experiment*

OXFORD was one of the first Authorities to make arrangements for pupils suffering from serious behaviour difficulties of various kinds in the school environment, to be withdrawn from their ordinary schools and placed in special "observational classes" as they were called in the 1930's. In establishing these classes it was planned to have a centre where "difficult but not stupid children can have intensive undivided attention which will either fit them to take their place again in the ordinary school or prove them to need institutional care". In spite of the changes in the theory and practice of dealing with maladjustment problems, the existing day special schools in Oxford which developed from these classes provide an invaluable opportunity for many emotionally disturbed children to adjust themselves to the normal day school-home relationship while they are still of primary school age.

In order to facilitate regular cooperation between the clinic and the teacher in charge

of the classes, a suitable private house in pleasant surroundings was obtained in 1939, to house both clinic and teacher and classes under the same roof ; this informal and formal contact between the clinic staff and the teaching personnel has served to promote the increasing success of the school. This school, called the Northern House School, was finally recognized in 1946 by the Ministry as a day special school for maladjusted primary school pupils. Pupils are selected for admission through the clinic, the school medical service, general practitioners and parents, to mention only a few of the possible sources, with the school psychologist as probably the most vital link in the procedure.

The heads of the local primary and secondary schools are encouraged to visit the clinic and the school to observe the work done there and, in particular, to gain an understanding of the methods employed for dealing with such pupils as may be presenting insuperable problems in their own schools. As a result many of these head teachers, whose pupils are recommended for transfer to Northern House, are often able to overcome initial parental resistance to such transfer by the explanation of the likely benefit resulting from such a move. After a visit to Northern House by the parents, it is extremely rare for the offer of a place to be declined ; compulsory attendance is never attempted. Sometimes pupils from independent schools have been admitted, and those of outstanding intellectual ability have been able to return quickly cured without any subsequent recurrence of trouble.

The school now comprises 3 classes of up to 15 pupils each. They are organised mainly on an age basis, some being admitted as early as the age of 6 or just under, and they normally leave at the end of the summer term, especially if they are going on to secondary schools. Other factors determining placement in classes are : attainment in the basic subjects, emotional development and relations with other children, and sometimes the likely relationship between the child and the class teacher.

Each class is taught by its own class

teacher as much of the day as possible, since the pupils are more likely to be adjusted to one teacher, especially during the first term or so ; but some lessons, such as music, physical education or practical work, are conducted by other teachers. No pressure is at first exerted on a restive pupil seeming to resent the need for conforming to the regular programme. The skillful class teacher while keeping on with the normal routine with the majority of the class, will keep close observation on the disturbed members, and seize the right moment to take advantage of a sudden desire to cooperate which can perhaps be unexpectedly turned to some useful purpose by sympathetic understanding.

When the time comes to decide which children seem able to cope with the social and educational demands of the ordinary school environment and hence ready to leave the school, the case of each pupil is considered at a conference, usually held during the spring term before the pupil is due to leave in the summer. When the parents have been interviewed and the transfer discussed by the educational psychologist with the head of the new school proposed for the pupil, the necessary arrangements are made by the Chief Education Officer. A detailed learning report is submitted to the receiving head teacher so that he may be fully informed and able to minimize any anxiety which the child may feel due to the transition from the somewhat informal atmosphere at Northern House to a much larger and usually a very different type of school. A systematic follow-up is maintained during the first post-learning year, and thereafter at roughly yearly intervals according to the progress of each individual.

The very high percentage of successes achieved with the boys and girls enrolled at Northern House has proved that the most unpromising and complex difficulties can be surmounted or improved substantially, by patient and skilled assistance from teachers and clinic staff operating in close harmony over a period lasting sometimes for years and sometimes only for a few terms.

(Foreign Education Digest)

## MISCELLANEOUS

### *Singing as they Work*

Young men and women taking part in international voluntary work camps in countries all over the world have contributed folksongs for the latest edition of "Work and Sing", an international songbook for use in work camps.

First published in 1947, "Work and Sing" has grown with the international work camp movement. The present edition, the third, gives a selection of a hundred folksongs from 26 countries which are popular not only among volunteers but can be enjoyed by young and old everywhere. Songs appear in the original language, with English translations for many of them.

Another songbook particularly suited to work camp groups is "Look Away", a collection of fifty Negro folksongs including a number of famous Negro spirituals sung in the south of the United States many years ago.

The two books are available from the Coordination Committee for International Voluntary Work Camps, 19 Ave. Kleber, Paris 16e.

(Unesco News)

### *In the eye of the beholder*

By Georges Fradier

WHEN, a few years ago, Unesco published a collection of essays called "Education and Art", lavishly illustrated with children's drawings and paintings, a school teacher friend of mine from the Alps wrote expressing his appreciation of this fine book.

"But", he added, "it's no use deluding oneself. I am all for allowing children to dabble with paints, to express themselves freely. We get some quite astonishing results. Only once they reach the age of ten or eleven it's all over. There is no colour in their work, no imagination—of course, in towns it is different—there can be a fresh start at the age. There are big

museums and, in some cases, a genuine artistic atmosphere. Whereas here there is nothing that can even conjure up the world of painting and sculpture.

"People say that an artistic sense is inborn. I don't agree. Our old people, up here, who have never had any artistic training, don't even notice the beauty of the alpine landscapes. As for my pupils, suppose I say to them: 'Look at those fir trees, see how magnificent they are', they will just shake their hands and say: 'yes, but with the cost of transport, wood sells dirt cheap.'"

I have waited till today to answer my friend's letter. Not that I have discovered any new method of solving his problem that would be enthusiastically acclaimed by educators and artists. It is simply that I have met an artist who without a museum or expensive equipment would be able to instill into children a feeling for beauty and a desire to create.

This artist is no theoretician. She has no degrees and no diplomas. She is a house wife who has children of her own and a large house to run. When she speaks of her work, it is in a shy, diffident manner: "I do not even know if it is any good," she says.

By "it" she means strange pictures made of leather, straw felt, etc.; statuettes, which at first seem to be made of porcelain, but which are really shells...and especially pieces of wood. You cannot really call it sculpture. The sculptor chooses his medium, then, after a good deal of effort, he creates a form. No one save he can foresee what its shape will be; he alone decides. Here, on the contrary it is the wood which decides. A wealth of forms and patterns lie hidden in their twisted roots and dead branches. The artist has merely helped to bring them to life.

One of the "statuettes" is called "After Me Cometh One". This artist did not get up one morning saying: "I am going to do a statuette of St. John the Baptist." She

found a branch lying on the grass split at one end and shaped like a trident at the other. She picked it up. To her it conjured up the image of an ascetic prophet, arms raised. Others might not have accepted that interpretation. But on returning home, Mrs. Ray scraped off some of the bark, removed a knot in the wood, deepened a notch and accentuated the relief—and there was the prophet, the locust eater, clad in a goat skin, “crying in the wilderness”.

Polished, varnished and impregnated with oils against vermin and humidity, but never painted, the piece of sap-wood, bark or root becomes a work of art. It is mounted on a base and anyone, whatever his age and position in life, will recognise it as a “living” shape: two wrestlers struggling desperately together, a screaming monster, the great Hand of peace.... Yet without the imagination of my artist friend, these works of art would be no more than twisted roots and brambles and branches of deodar, cedar and gardenia.

It seems to me that my teacher friend might draw a useful lesson from the work of this lady. I repeat: there is nothing novel about it. But a lesson does not have to form stems from the things you see rather than from acquired knowledge. Or rather, the sense and taste for shape and form depends on a capacity to look at things. As Paul Valery put it: “Examine all things on earth as though you had never seen them before.” In much the same way a painter sees limitless combinations of shapes and colours in a composition which the layman would describe as “a window, a table and a flower pot.”

Most children aged between 4 and 6 are capable of viewing the world in the same perspective as the painter, though, of course, in a less sophisticated way. Children are very sensitive to shapes and their world is rich in metaphors. A stone is always something more beautiful than a stone, a leaf is like silk, or like a face or a butterfly. The child picks up a bit of paper or an old button as if it were a bird or a shell. Pompously, the adult tries to define categories

and species: “*This* is such and such a mineral. That is such and such a mountain. This is clean, that is dirty.” But the child says to himself: “It is like.... a lion, an angel, a shoe. It is like....”

To come back to my village teacher. I wonder whether he and his fellow teachers should not allow their 10-and 12-year old pupils to continue this game of make-believe. Let them go on searching for images with a vision of a world that is fascinating because it is infinitely varied—a hundred, a thousand other things.

I suggest, therefore, that my friend from the mountain school should get his pupils to display in class once or twice a week the natural “masterpieces” picked up during a walk, polished and “brought to life” by some minor alteration. At first they will believe that the form or pattern is due chiefly to chance. But, gradually, they will come to understand that no thing of beauty whether it be a branch, a fir tree, marble or precious stone—is really beautiful until our eyes have “learned to see” it. There is enormous scope for children in this “game”.

(Unesco News)

### Sewing Classes in the Desert

**I**N a camp for Middle East refugees near Khan Yunis, in the Gaza strip, the construction of a small building is being eagerly watched by women and girls. The building is the new Sewing Centre where sixty seamstresses will be trained during the year. It is being paid for by the United Nations Association of Great Britain, which has contributed funds to meet expenses up till the end of June 1959.

Among the million refugees living in camps in Middle Eastern countries, those in the Gaza strip (about 220,000) are probably the worst off. It is nearly impossible for them to find regular jobs. Most of them are wholly dependent upon the United Nations Relief and Works Agency for food, shelter, medical care and schooling. They want to learn a trade but, in the women's case, the number of applications for the

## WINDOW ON THE WORLD

Agency's sewing centres is nearly five times as high as the number of places available.

There are now nine sewing centres in the Gaza strip. In each of them, thirty women and girls over school-age are instructed in cutting and sewing. Each course lasts six months and classes are held six times a week. All materials are supplied by UNRWA, and everything the girls make in the centres become their own property.

(Unesco News)

### *Tamerlane's Diplomatic Correspondence*

**A**N interesting series of documents which throws new light on diplomatic relations

between rulers of Central Asia and Western Europe in the early part of the 15th century is now being published in the U.S.S.R. It includes correspondence between Tamerlane, Manuel II Palaeologus, the King of France, and the King of England. The letters speak of Tamerlane's preparations for war with Turkey, and Central Asia's trade relations with the West.

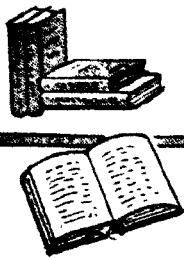
The documents with are being published for the first time in the Soviet Union, have been collected by Professor I. Umnyakov of the Uzbek State University. The first part of the collection has already appeared with a detailed commentary by Professor Umnyakov ; the remainder will be published shortly.

(Unesco News)

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'The more originality you have in yourself, the more you see in others'  
—Pascal

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# book reviews

**Technical Education and Social Change** by Stephen F. Cotgrove; Published by Allen & Unwin Ltd., London, price 25s.

EVERY human endeavour which has to continually respond to not only scientific and technological advances but socio-economic changes is a subject of interesting study in both of change and of the rate of change in ideas, beliefs and values. One such field is Technical education which, as the mainspring of all activity for securing an increasing application of science and technology in the economic life of a country and for providing an education worthy of human kind, presents a picture as fascinating in the diversity of its problems as it is impressive in its achievements. Not the least important of its problems is the need to meet the changing social conditions which bring in their wake a demand for new kinds of services and thus for new types of training which, however, are very often strongly resisted by those with vested interests in old established forms of training and in a tradition-bound educational system. An objective account of how each industrially advanced country has faced this problem and how its efforts have been influenced by the complex of social forces is necessary for an assessment of the deficiencies and achievements in Technical education.

With England and Wales as the main scene of activity, Stephen F. Cotgrove has examined the various social forces which have shaped the development of Technical education, the reasons for the late start in the 19th Century and for the slow progress

in the inter-war years. The realisation of the practical value of science in the 17th and 18th centuries resulted in science being associated with useful knowledge divorced from the main corpus of liberal studies and given an inferior status. By 1824 a strong tradition of teaching the principles of science underlying practice to those working in the day had been established which exercised great influence in shaping the subsequent growth of Technical education. By 1951 the way had been prepared for an expansion of Technical instruction and the threat of foreign competition in economic affairs stimulated the first state aid for scientific and technical instruction. Nevertheless progress was slow. Among the various factors responsible for that according to Cotgrove, were the failure of industry to exploit science and limited working class support from the skilled artisans. "Among industrialists there was apathy and even hostility, backed by such arguments as a fear of losing trade secrets, and springing from a rooted disbelief among many in the value of technical instruction. Fifty years of industrial pre-eminence had bred complacency and had established industrial traditions in which science and research were absent while the proprietors and managers were mainly without a knowledge of science—a reflection of the low status of science in the educational system and its neglect by the public and elementary schools". Clearly, nowhere is progress of Technical education possible unless the educational system particularly at the primary and secondary stages responds to the changing needs of an industrial society.

The success of any provision of Technical

education depends upon its ability to attract students. Therefore for an understanding of the aims, organisation and development of technical education, it is necessary to analyse the various social factors which influence students to join technical institutions. Cotgrove has given such an analysis with particular reference to motives for attendance, rewards of study, trends in enrolment and influence of social class. According to him "the recruitment of students to the technical colleges cannot be explained entirely in terms of the ambitions of students and the rational calculation of the occupational advantages of attendance. The class factor considerably reduces the potential supply of students in science and technology to full time courses in technical colleges and Universities. There is also an association between social origins and part time attendance, but this would appear to be indirect through the influence of social origins on entry to occupations and the association between occupation and part time attendance." That is indeed fresh light thrown on a field whose usefulness has to be extended to all levels of students, irrespective of their social origins and expectation of immediate occupational rewards. A two-fold measure becomes necessary to prevent wastage in technical institutions and ensure increasing supply of trained engineers and technicians. First, greater encouragement and assistance from employers to both full time and part time courses in technical institutions. Second, orientation of secondary education to suit further education in technical institutions.

There are various other aspects of technical education which are in one form or another influenced by social changes. For instance, cooperation between industry and technical institutions; Relations between Universities and technical colleges; Influence of professional institutions on the training of engineers and award of recognised qualifications; Content and standard of general education and liberal studies in technical courses; Development of post-graduate studies and research etc. Cotgrove has discussed these questions from the point of view of present trends and future policy for the training of engineers and technicians. He has clearly brought

out the difficulties encountered, particularly the influence of social changes such as the class structure and the educational values and traditions of the 19th century which have reduced the supply of trained scientists and engineers in the past.

L.S. Chandrakant

**Once Round the Sun.** By Ronald Fraser; Published by Hodder & Stoughton Ltd., London, 1957; pp. 160; price 16s.

THIS book is an attempt to unfold the thrilling and exciting story of the International Geophysical Year, 1957-58. The book is meant for a reader with an enquiring mind who wants to keep himself informed about all those activities of mankind which are in pursuit of knowledge. Of particular interest is the fact, in this case, that the author of the present work is the Administrative Secretary of the International Council of Scientific Unions, a non-governmental organisation which has sponsored the world-wide operation of the current International Geophysical Year.

A few items like the launching of baby moons or man-made satellites—better known as Sputniks and Explorers—did hit headlines in newspapers and drew the attention of the public to the planned and cooperative venture of the International Geophysical year. But these big items are only a part of this great enterprise and would not by themselves enable the reader to follow systematically the itinerary of the year and understand its varied operational activities with all its significant implications. Besides, a proper perspective of even purely scientific, pursuits is difficult when politics is allowed to mix with highly academic issues such as are involved in this venture. There was, therefore, a positive need for such a book to educate the public on the main issues involved in the International Geophysical Year.

The author opens his work—dedicated significantly to the next generation—with the remark that the geographical exploration of the earth is all but finished. He, however, hastens to add that the age of scientific exploration of the earth with all its paraphernalia is now upon us. It is true that the essence of the age of scientific

exploration is not geography though it may involve a degree of geographical exploration. Obviously the essential feature of the age of scientific exploration is the urge to a better understanding of the physical properties of the earth as a whole : its core, its crust, its oceans, and its atmosphere rather than its surface topography.

Dr. Fraser has divided his book into two parts. Part I of the book has been aptly titled 'On the 'boundaries of the known world'. It gives an outline of the present boundaries of knowledge in geophysics : the investigation of the interior of the earth, the oceans, the atmosphere and the influence of the sun on terrestrial phenomena. While the author deals with the present boundaries of the known world, he has skilfully attempted to identify and clarify some of the problems that confront the scientists working in various fields of narrow specialization. The author has acquitted himself creditably in putting forth some of the pressing problems briefly and clearly. In fact, he has succeeded in putting these in such a way that even a non-specialist of a given branch of science will be able to follow it without much difficulty.

On the periphery of our proven knowledge of widely accepted scientific theories stand a number of hypotheses that are still awaiting factual evidence or authentic data on a large scale, in the absence of which these can neither be accepted nor discarded. Also many of these theories and hypotheses are closely related to and dependent upon one another for support both direct and indirect. In fact, it is the first part of the book which is of real importance to a reader because it provides the background for the proper understanding and appreciation of the entire enterprise of the International Geophysical Year.

Part II of the book is entitled 'Towards New Horizons'. It deals with the programme of the International Geophysical Year : an account of the expeditions setting out into the dark unexplored continents of man's environment that has to be searched against the background of the areas he has already explored.

One of the chapters deals with the origin, development and execution of the idea of a twenty-four hour watch of the sun. This subject has been included because the scientists have realised by now that the physics of our planet cannot be properly studied without reference to its sun. Also, it explains that the 1957-58 year has been selected for the purpose because it coincides with the sun's recurrent phases of enhanced activity with a maximum number of sun-spots, solar prominences and flares.

A separate chapter is devoted to Antarctica describing graphically the herculean task of nine national teams that are at present engaged in this enterprise. This account duly supplemented with a few extracts from diaries of scientists working in this far off and utterly inhospitable land is preceded by a lively discussion of Antarctic Meteorology—the biggest single gap in our present-day globed meteorology. Equally important are the subjects such as radio cut-offs, whiteouts, earth's magnetic field, aurorae australis and its correlation with aurorae borealis or 'Northern Lights', twinkling of stars, glaciers—their advance and shrinkage, and ionosphere above Antarctica that are being probed into systematically by these teams.

The next chapter deals with the precise programme of scientists and research workers in each of the ten following disciplines : Ionospheric Physics, the Aurora, Geomagnetism, Cosmic Rays ; Meteorology, Oceanography, Glaciology ; Seismology, Gravity and Latitudes and Longitudes. These are arranged into three categories given above according to the degree of their urgency—essential, contributory and convenient—to make the enterprise of the International Geophysical Year a real success in all its practicality.

This is followed by a special chapter on Rockets and Satellites which are the most debated topics of the day. This chapter, however, leaves a reader rather disappointed as he expects more detailed and authentic information on this topic to verify, clarify and enlarge his knowledge about the subject. Nonetheless, the author has succeeded in his

twofold job, firstly, of arousing the interest of his reader and secondly, to provide him with the necessary background to follow and appreciate what the Year aims to achieve through its gigantic programme.

We would have to wait a little more time and give the author an opportunity to be in a position once again to narrate lucidly and graphically the specific and tangible results and outcomes of this biggest ever endeavour undertaken by an international community for widening the mental horizons of mankind. It is only then that a reader will be able to ascertain what the author has tried to imagine as possible outcomes of this enterprise in the last two pages of his book by way of summing up. Today, at any rate, we have to agree with him so far as the major outcome of this endeavour is concerned that men of all nations are willing, nay eager, to join in a drive towards the same goal ; not merely to discuss the matter but to do something about it.

B. S. Parakh

**"Handbook of Educational Excursions for Delhi Schools"** published by the Alumni Association, Central Institute of Education, Delhi.

This small brochure, the first publication

of the Central Institute of Education Alumni Association, is the result of a prolonged and cooperative effort. Designed to awaken interest in local excursions among the Delhi teachers, it lists and describes vividly places of educational interest for teachers and students of five different subjects—History, Geography, Civics, Economics and Science. In organising educational excursions it is important that the students should have an idea of what they are going to see and from this point of view this volume should prove a useful guide not only for students of Secondary schools of Delhi but also for those of adjoining States coming to Delhi to visit educational institutions.

It is a fact that even in this historic city of Delhi most of our students are distressingly ignorant of even well known places of educational interest either because they are mere 'book worms' or lack a sense of inner curiosity which is the only foundation for the appreciation of beauty and for enlarging one's mind. The handbook is intended to arouse this curiosity among students. The handbook will not only prove useful to students from the informative standpoint, it will stimulate their interest in what they read and make them excursion-minded.

R. S. Bhatia

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'Show me a family of readers, and I will show you the people who move the world.'

—Napoleon

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